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ABSTRACT

This report presents a description of the status of academic libraries in 1994, a time of rapid technology-related change and increased introduction of electronic services. Two of the national education goals for the year 2000 emphasize the important roles played by resources and staff efforts of academic libraries. The report presents detailed tabulations for 1994 and historical comparisons with previous years, with a focus on comparisons since 1990. The data are from the 1994 Academic Libraries Survey (ALS), a part of the Integrated Postsecondary Education Data System (IPEDS) of the United States Department of Education's National Center for Education Statistics. Topics covered in the report include: library number and diversity; services; collections; staff; and expenditures. Highlights of findings are provided at the beginning of the document. Appendix A contains methodological information for the 1994 survey; Appendix B contains detailed tables; Appendix C is the ARL benchmark listing; and Appendix D is a copy of the survey form. (AEF)

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NATIONAL CENTER FOR EDUCATION STATISTICS

Survey Report

September 1998

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NATIONAL CENTER FOR EDUCATION STATISTICS

Survey Report September 1998

The Status of Academic Libraries in the United States

Results from the 1994 Academic Library Survey with Historical Comparisons

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Highlights

Services

- In 1994, 3,303 of the 3,639 institutions of higher education in the United States reported that they had their own academic library. By Carnegie Classification, the largest number of academic libraries (1,175) was at Associate of Arts institutions with 36 percent of the total (table 1 and figure 1).

- Just over one-fourth (28 percent) of academic libraries in higher education institutions have branch libraries and among those with branches the mean number of branches was 2.6 (table 1).

- In fiscal year 1994, general collection circulation transactions in the nation's academic libraries at institutions of higher education totaled 183.1 million and reserve collection circulation transactions totaled 48.4 million (table 2).

- For general circulation transactions, the total circulation per full-time-equivalent (FTE) enrollment was 18.3 (table 2). General circulation ranged from 8.3 per FTE enrollment in Associate of Arts institutions to 31.4 per FTE in Research I and II institutions (table 3).

- In 1994, academic libraries provided a total of 8.8 million interlibrary loans to other libraries (both higher education and other types of libraries) and received 6.3 million loans (table 2). Interlibrary loans to other institutions increased by 25 percent and loans received increased by 40 percent over the period between 1990 to 1994 (table 2).

- Overall, the largest percentage of academic libraries (43 percent) reported having 60-79 hours of service per typical week. However, 41 percent provided 80 or more public service hours per typical week. The mean number of public service hours per week was 74.6 hours (figure 3).

- Taken together, academic libraries reported a gate count of 17.8 million visitors per typical week (1.8 visits per total FTE enrollment) (table 2).

- Over the fiscal year 1994, the academic libraries made 487,000 presentations to groups serving about 6.1 million individuals (table 2 and appendix table B-3).

Collections

- Taken together the nation's 3,303 academic libraries at institutions of higher education held a total of 776.4 million volumes of books, bound serials, and government documents and 422.3 million titles at the end of FY 1994 (table 4).

- In 1994 the overall mean number of volumes held per FTE enrollment was 78 and the median per FTE enrollment was 57 volumes (table 6). The mean number of volumes held per FTE enrollment ranged from 16 in public Associate of Arts to 258 in private Research I and II institutions (table 6). The number per FTE enrollment has increased from about 57 in 1974 to the current figure of 78 in 1994 (table 5).

- Of the total volumes held at the end of the year, 43 percent (336. 6 million) were held at the 125 institutions categorized under the 1994 Carnegie Classification as Research I or Research II institutions (table 6 and figure 7). Research institutions have about 23 percent of FTE enrollment. In contrast 7 percent of volumes were at the Associate of Arts granting institutions with 32 percent of FTE enrollment (figure 7).

- The number of volumes added per FTE enrollment has declined from 3.0 in 1974 to a low of 1.9 in 1990. In 1994 the number added per FTE enrollment was 2.2 (table 5 and figure 6).

Staff

- There was a total of 95,843 FTE staff working in academic libraries in 1994. Of these 26,726 (28 percent) were librarians or other professional staff; 40,381 (42 percent) were other paid staff; 326 (0.3 percent) were contributed services staff; and 28,411 (30 percent) were student assistants (appendix table B-8 and figure 8).

- The total number of library staff including student assistants declined by about 0.1 percent from 1990 to 1994 (table 8). Overall since 1976, total library FTE professional staff have increased by 15 percent, while the total FTE staff of institutions of higher education have increased by about 36 percent (figure 10).

- There were 9.6 FTE library staff (including student assistants) per 1,000 FTE enrollment (table 8). The institutional median library staff per 1,000 was similar (8.9 FTE) (table 8). Excluding student assistants the median was 5.9 FTE library staff per 1,000 enrollment (appendix table B-12c).

Expenditures

- In 1994, operating expenditures for libraries at the 3,303 institutions of higher education totaled $4.01 billion (table 9). Half the total went to salaries and wages, 34 percent to information resources, and 16 percent to other expenses (figure 11).

- Among information resources expenditures, current serial subscriptions were the largest category, accounting for fully half of the expenditures (figure 12).

- Expenditures per FTE enrollment in constant 1994 dollars were $406 in 1974 and $401 in 1994. Low points in expenditures per FTE enrollment were reached in 1981 ($345) and 1990 ($367). Between 1990 and 1994 expenditures per FTE enrollment increased by about 5 percent in constant dollars (table 10 and figure 13).

- The libraries at the Research I and II and Doctoral I and II institutions (7 percent of the total institutions) accounted for $2.09 billion, or 52 percent of the total operating expenditure dollars at all college and university libraries (calculated from table 1 and table 10).

- In 1994, the median total operating expenditures per FTE enrollment was $291 and the median for information resource expenditures was $86.15 (table 10 and appendix table B-12d).

- The percentage of total institution Education & General (E&G) expenditures for academic libraries was 3.9 in 1974 and 2.9 in 1994 (figure 14). Library expenditures as a percent of E&G expenditures declined 2.3 percent between 1990 and 1994 (table 11).

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The collection and publication of academic library data has been a team effort. It would not have been accomplished without the support and effort of a number of individuals and organizations. First, we would like to thank the academic librarians who provided the information upon which the survey report is based and the State Integrated Postsecondary Education Data System (IPEDS) Library Coordinators who submitted the data to the National Center for Education Statistics (NCES). The survey was coordinated by Jeffrey Williams, the NCES project officer. The data were collected and processed by the U.S. Bureau of Census Government Division under the management of Thelma Hall. The American Library Association (ALA) Office of Research and Statistics and the IPEDS Library Project Advisory Committee were instrumental in designing the survey.

Members of the IPEDS Library Project Advisory Committee during the time of the study were: William Crowe, University of Kansas; Paul DuMont, Dallas County Community College District; Larry Frye, Wabash College; Patricia Kelley, Eastern Washington University; Martha Kyrillidou, Association of Research Libraries; Carolyn Norman, California Community Colleges; Ron Naylor, University of Miami Libraries; Keith Lance, Colorado State Library.

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The Status of Academic Libraries, 1994

Introduction

Two of the national education goals for the year 2000 emphasize the important roles played by resources and staff efforts of academic libraries. The nation's fourth education goal, which is concerned with the ongoing need for access to learning resources for teachers and faculty members, and the nation's sixth education goal, which speaks of lifelong learning, both stress the importance of maintaining and improving the nation's academic libraries (National Education Goals Panel, 1994). This report presents a description of the status of academic libraries in 1994, a time of rapid technology related change and increased introduction of electronic services (Lynch, 1996).

The report presents detailed tabulations for 1994 and historical comparisons with previous years, with a focus on comparisons since 1990. The data are from the 1994 Academic Library Survey (ALS), a part of the Integrated Postsecondary Education Data System (IPEDS) of the United States Department of Education's National Center for Education Statistics (NCES).

IPEDS is the U.S. Department of Education's vehicle for collecting data from all postsecondary institutions in the United States. Other surveys included within IPEDS are Institutional Characteristics, Fall Enrollment, Completions, Finance, Faculty Salaries, and Fall Staff. The data in this report come from the institutions of higher education (IHE's) in IPEDS and include all colleges and universities with accreditation at the higher education level as recognized by the Secretary of the U.S. Department of Education.

Topics Covered in the Report

Consistent with the 1992 report, *The Status of Academic Libraries in the United States, Results from the 1990 and 1992 Academic Library Surveys (Rossi, Daughety, 1997)*, the 1994 report focuses on several key library indicators. These indicators have been expanded over the 1992 report to reflect increased attention to library services. The indicators chosen for the report reflect those developed by the Association of Research Libraries. This group has developed a series of 30 ratio indicators (Association of Research Libraries, Indicators; see appendix C for a listing of the ratios). Many of these can be developed from information collected in IPEDS and we have included several of them in this report. In addition we report on several other data items included in the IPEDS ALS questionnaire.

Listed below are the topics covered in the report.

Library number and diversity

- Number of branch libraries
- Distribution by Carnegie Classification

Library services

- Library circulation and circulation per full-time-equivalent (FTE) enrollment
- Interlibrary loan transactions and ratio of items loaned over items borrowed
- Reference transactions including computer searches per FTE enrollment
- Number served in presentations to groups
- Gate count of visitors to library per typical week
- Public service hours

Library collections

- Total volumes and total serial subscriptions
- Volumes held and added per FTE enrollment
- Serial subscriptions per FTE enrollment
- Other collection items
- Ratio of items added to items held

Library staff

- Professional staff as percentage of total staff
- Other paid staff as percentage of total staff
- Student assistants as percentage of total staff
- Number of library staff members per FTE enrollment

Library expenditures

- Distribution of expenditures between salaries, information resources, and other expenditures
- Distribution of information resources expenditures; serials as percent of the total
- Total expenditures per full-time-equivalent (FTE) enrollment

- Expenditures for information resources per FTE enrollment
- Expenditures for serials per FTE enrollment
- Operating expenditures as a percent of total Education and General (E&G) expenditures

Appendix A contains methodological information for the 1994 survey and Appendix B contains detailed tables. Appendix C is the ARL benchmark listing and Appendix D is a copy of the 1994 survey form.

Definition of an Academic Library

The following definition was used by the study and appeared on the survey form.

> *An Academic Library is defined as an entity in a postsecondary institution that provides all of the following:*
>
> 1. *Organized collection of printed or other materials, or a combination thereof;*
> 2. *A staff trained to provide and interpret such materials as required to meet the informational, cultural, recreational, or educational needs of clientele;*
> 3. *An established schedule in which services of the staff are available to clientele;*
> 4. *The physical facilities necessary to support such a collection, staff, and schedule.*

This definition includes libraries that are part of learning resource centers.

Coverage and Response

Of the 3,639 higher education institutions, there were 132 institutions that did not have their own library but shared a library with one or more of 70 other institutions. These institutions were excluded from the survey. There were also 204 institutions that were found to be out of scope because they did not have an academic library as defined by the survey. Thus in 1994 there were 3,303 academic libraries in the colleges and universities in the 50 states and the District of Columbia.

In 1994, there were 3,303 academic libraries at institutions of higher education (IHE's) in the 50 states and D.C.

Academic Library Survey Response Rates. The response rate for the 1994 IPEDS Academic Library Survey was 93.7 percent. Of the 3,303 college and university libraries, 209 or 6.3 percent were complete nonrespondents. Item response ranged from a high of 92.2 percent for operating expenditures for books to 56.4 percent for microform titles added to collections. Any items discussed in the text with less than 70 percent response rate are noted. Appendix tables A-1 to A-3 present further information on overall and item response rates. Data were imputed for nonresponse.

Coverage and Time Frames. The report covers libraries in higher education institutions in the 50 states and the District of Columbia (D.C.). The focus of the report is on 1994 data with detailed comparisons to 1990. We also include selected historical trend comparisons with earlier reports in the series back to 1974. The Academic Library survey has been conducted by NCES since 1966 at irregular intervals. Beginning with the 1990 survey, the Academic Libraries survey has been conducted on a 2-year cycle. Although there have been changes in the form over the years, the series is generally considered to be continuous. Data collected since 1974 have been summarized and reported in the *Digest of Education Statistics* in various years and this information from the Digest is summarized in this report to give an historical context to the 1994 academic library data.

The Academic Library Survey response rate was 93.7 percent in 1994

For the 1994 data collection, library staff data were reported for fall, 1994. Operating expenditures and library collections were reported for fiscal year (FY) 1994. Library circulation and interlibrary loans are also for fiscal year 1994 and other library services are for a typical week in fall of 1994. FY 1994 is defined as any 12-month period between July 1, 1993, through September 30, 1994, that corresponds to the institution's fiscal year.

To ensure complete coverage, imputed data are used in reporting all 1994 data, however, the percent change comparisons with 1990 data were calculated using only those institutions that responded to the item in both 1990 and 1994. These comparisons are made only for items in which 70 percent or more responded in both years.

Classifications Used in the Report

The tables and charts in this report present the data by control (public, private); size of FTE enrollment (less than 1,500; 1,500 to 4,999; 5,000 or more); and the 1994 Carnegie Classification. For table presentation, "level I" and "level II" of the Carnegie Classifications were combined. The Carnegie Classification categories used are as follows: Research I and II; Doctoral I and II; Master's I and II; Baccalaureate I and II; Associate of Arts; and Specialized.[1] In addition there were 213 institutions that did not have a Carnegie classification in 1994 and these were put into a "not classified" category (The Carnegie Foundation for the Advancement of Teaching, *A Classification of Institutions of Higher Education, 1994 Edition,* Princeton, N.J.). Appendix B tables also include tabulations of data by highest offering, a categorization based on the IPEDS classification of the highest degree awarded by the institution (doctor's, master's, bachelor's, and less than 4-year).

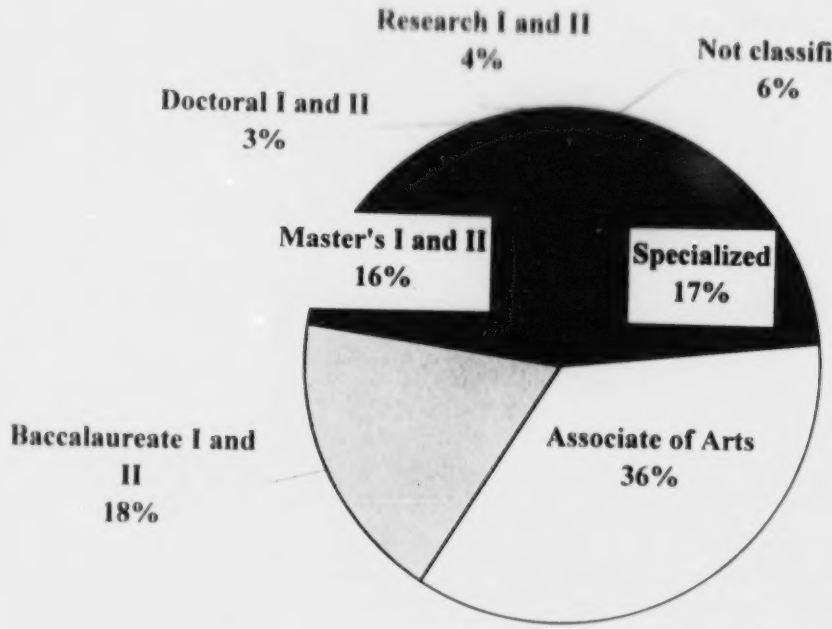
[1] Specialized institutions offer degrees ranging from the bachelor's to the doctorate, at least 50 percent of which are in a single specialized field, e.g., "theological seminaries, Bible Colleges, and other institutions offering degrees in religion," and "schools of art, music, and design."

Number and Diversity of Academic Libraries

The term "academic library" includes a diverse group of libraries that share the mission of higher education in very different settings with a wide range of institutional histories and resource levels. In 1994, just over half the 3,303 academic libraries were in private institutions (53 percent) and 47 percent were in public institutions (table 1). The distribution of academic libraries by institution type/mission mirrors that of the distribution of IHE's. By Carnegie Classification, the largest number of academic libraries was in Associate of Arts institutions with 36 percent of the total. Only 4 percent (125) of academic libraries were at Research I and II institutions and another 3 percent (110) were at institutions classified as Doctoral I and II (figure 1 and table 1). About 16 percent were in Master's I and II, 17 percent (556) were at institutions classified as Specialized and 18 percent were at Baccalaureate I and II institutions.

The largest proportion (36 percent) of academic libraries were at Associate of Arts granting institutions

Figure 1. —Distribution of academic libraries by Carnegie Classification of institutions: fall 1994



SOURCE: United States Department of Education, National Center for Education Statistics, (NCES), Integrated Postsecondary Education Data System (IPEDS), *1994 Academic Library Survey*

Historical Growth

In 1967, there were 2,145 academic libraries reported (Beazley, 1979). By 1974 there were 2,972 academic libraries reported, and in 1987 there were 3,438 (NCES, *Digest of Education Statistics, 1996*, table 412). In 1992, there were 3,274 libraries and in 1994 there were 3,303. Since the number fluctuates, in part, based on the manner in which branch campuses were classified by the institution, it is not possible to conclude that there were more academic libraries in 1987 than 1994.

Branch Libraries

Just over one fourth (28 percent) of academic libraries have branch libraries

In 1994, the 3,303 academic libraries reported a total of 2,383 branches. About 28 percent (907) of the academic libraries reported having branch libraries. In 1994, among those having branches the mean per library was 2.6 and the median was 1. By Carnegie Classification, the percent having branches ranged from 15 percent in "Not classified" and 18 percent in Specialized institutions to 90 percent in Research I and II institutions. The number of branches reported ranged from 1 to 31 (data not shown). By Carnegie Classification, among those having branches, the mean number ranged from 1.7 in Specialized to 7.7 in Research institutions (table 1).

Table 1. — Number of libraries, libraries with branches, and mean number of branches among libraries having a branch by institutional characteristics: fall 1994

Institutional characteristic	Total libraries		Libraries with branches		Branches	
	Number	Percent	Number	Percent	Number	Mean
Total	3,303	100%	907	27.5%	2,383	2.6
Control						
Public	1,548	46.9	501	32.3	1,424	2.8
Private	1,755	53.1	406	23.1	959	2.4
Carnegie Classification						
Research I and II	125	3.8	113	90.4	873	7.7
Doctoral I and II	110	3.3	79	71.8	231	2.9
Master's I and II	518	15.7	154	29.7	293	1.9
Baccalaureate I and II	606	18.3	136	22.4	239	1.8
Associate of Arts	1,175	35.6	295	25.1	524	1.8
Specialized	556	16.8	98	17.6	164	1.7
Not classified	213	6.4	32	15.0	59	1.8

SOURCE: United States Department of Education, National Center for Education Statistics, (NCES) Integrated Postsecondary Education Data System (IPEDS), *1994 Academic Library Survey*

Academic Library Services

This report is written at a time of rapid changes in the mediums of information exchange, when many academic libraries are becoming "virtual" libraries, as well as physical collections, offering remote access to library catalogs and reference bases (Hughes, 1992; Moran, 1984; Ardis, 1994; Neal, 1996). Students may access the catalog from their dorm rooms, computer labs, homes and offices. Questions arise as to the impact these changes may have over time on the count of library services such as circulation, reference transactions, frequency of visits to the library, and hours of service.

Table 2.—Total number of services provided and number per full-time-equivalent (FTE) enrollment by type of service: 1994 fiscal year and percent change from 1990

Service Category	Total number in thousands 1994	Percent change 1990-94	Number per full-time-equivalent (FTE) enrollment 1994	Percent change 1990-94
General circulation	183,123	11.6%	18.3	5.3%
Reserve circulation	48,380	*	4.8	*
Loans to other libraries per year	8,761	25.4	0.9	18.3
Loans from other libraries per year	6,344	40.4	0.6	32.7
Reference transactions per week	2,147	*	0.2	*
Served in presentations to groups per year	6,081	*	0.6	*
Visits to library (gate count) per week	17,830	*	1.8	*

*Less than 70 percent response in either 1990 or 1994 or both years.

NOTE: Totals reported for 1994 include imputed data to account for nonresponse. Calculations of percent change include only those institutions reporting in both 1994 and 1990 and are reported only for variables in which 70 percent or more of libraries reported for the item in both 1990 and 1994. FTE enrollment is calculated by taking one-third of part-time enrollment and adding the amount to full-time enrollment. For calculations of percent change, actual FTE enrollments for 1990 and 1994 for institutions included were used in calculations.

SOURCE: United States Department of Education, National Center for Education Statistics (NCES), Integrated Postsecondary Education Data System (IPEDS), *1990 and 1994 Academic Library Surveys; and 1989-90 and 1993-94 Fall Enrollment Surveys*

Items Borrowed (Circulation)

In 1994 there were 183.1 million general circulation loans and 48.4 million reserve loans (table 2 and appendix table B-1). General circulation per full-time-equivalent (FTE) enrollment was 18.3 (table 3).

General circulation per FTE enrollment was 18.3 per year in 1994

Change in General Circulation Since 1990. When the set of institutions reporting in both 1990 and 1994 are compared there was an 11.6 percent increase in general circulation over the period and a 5.3 percent increase in circulation per FTE enrollment (table 2).

Table 3.—General circulation per full-time-equivalent (FTE) enrollment by institution control and Carnegie Classification: 1994

Institutional characteristic	General circulation per full-time-equivalent enrollment (FTE) in 1994		
Carnegie Classification	Total	Public	Private
All	18.3	16.8	23.4
Research I and II	31.4	29.8	37.6
Doctoral I and II	19.6	18.4	23.0
Master's I and II	15.3	15.5	14.7
Baccalaureate I and II	20.7	17.2	21.8
Associate of Arts	8.3	8.6	8.0
Specialized	29.0	24.4	30.9

NOTE: Data reported for 1994 include imputed data to account for nonresponse. FTE enrollment is calculated by taking one-third of part-time enrollment and adding the amount to full-time enrollment.

SOURCE: United States Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), 1990 and *1994 Academic Library Surveys, and 1989-90 and 1993-94 Fall Enrollment Surveys.*

Differences in Circulation by Institution Type. General circulation per FTE enrollment varies considerably by institution type, ranging from 8.3 in Associate of Arts granting institutions to 29.0 in Specialized and 31.4 in Research I and II institutions (table 3). Circulation per FTE enrollment is higher in private than public Research I and II, Doctoral I and II, Baccalaureate I and II, and Specialized institutions (table 3).

Interlibrary Loans

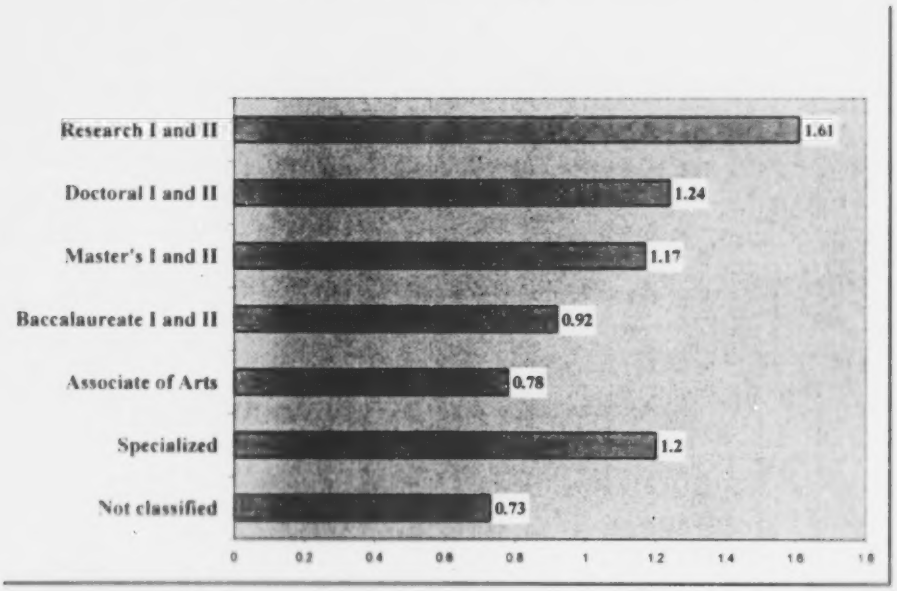
While internal general circulation has increased only modestly in recent years—interlibrary loans increased at larger rates, perhaps reflecting the wider access to on-line library college catalogues, and the strategy of shared resources. The total number of items loaned through interlibrary loan was 8.8 million and the number received was 6.3 million in 1994. Using the figures from the institutions reporting in both 1990 and 1994, there was an increase of 25 percent in items loaned and an increase of 18 percent in items loaned per FTE enrollment (table 2). Loans received from other libraries increased by even larger rates–40 percent overall and per FTE enrollment by 33 percent (table 2).

Interlibrary loans to other institutions increased by 25 percent and loans received from other libraries increased by 40 percent between 1990 and 1994

Ratio of Interlibrary Items Loaned to Items Borrowed. The total number of interlibrary loans received (6.3 million in 1994) was smaller than items loaned (8.8 million in 1994) because academic libraries also loan to non-academic libraries (table 2). The Association of Research Libraries has selected the "ratio of items loaned to items borrowed" as an indicator and this is an example of how an indicator can vary considerably by type of library and enrollment size.

Among those libraries having at least one item loaned and one item borrowed through interlibrary loan, the mean per institution ratio of items lent to items borrowed was 2.54, however, the median per institution was .99 (data not shown). This difference between the mean and the median reflects a very skewed distribution. By Carnegie Classification, the median ratio ranged from .73 in "not classified" and .78 in Associate of Arts colleges to 1.61 in Research I and II universities (figure 2).

Figure 2.—Median ratio of items loaned to items received through interlibrary loans by Carnegie Classification: 1994



SOURCE: United States Department of Education, National Center for Education Statistics (NCES), Integrated Postsecondary Education Data System (IPEDS), *1994 Academic Library Survey*

Reference Transactions

A total of about 2.1 million reference transactions per week (including computer searching) were reported (table 2). Fewer libraries (72 percent in 1994) reported information on reference transactions than reported circulation and interlibrary loans. Only about two-thirds of the libraries reported this information in both 1990 and 1994. Moreover, the interpretation of reference transaction may be inconsistent and is changing with the use of electronic searching for information. A comparison of those who did report for these categories indicates, however, that these categories remained stable over the period.

Visits to the Library (Gate Count)

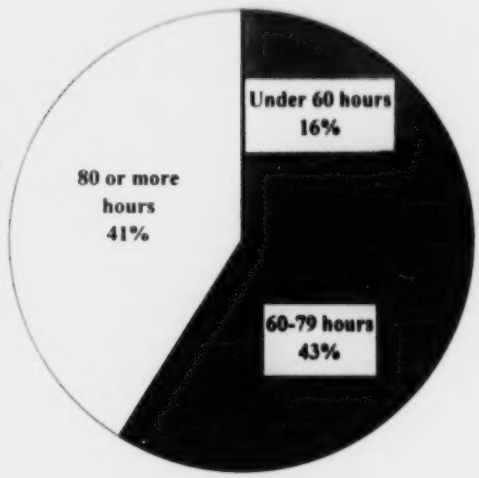
Academic libraries reported a total gate count of 17.8 million visits per week or 1.8 visits per FTE enrollment (table 2). As in past surveys this survey also had lower than average item response, with only 68.3 percent of libraries reporting on the gate count.

Public Service Hours

On average, academic libraries were open 75 hours per week in 1994. The mean hours ranged from 65 in Associate of Arts institutions to 107 in Research I and II institutions. The largest number (43 percent) of academic libraries were open between 60 and 79 hours, however, 41 percent were open 80 or more hours per week. About 16 percent were open under 60 hours and 3 percent were open under 40 hours (calculated from Appendix B, table B-2).

Figure 3.—Percent distribution of academic libraries by public service hours per week and mean public service hours per week by Carnegie Classification: 1994

Distribution of public service hours



Mean public service hours per week

All Institutions of Higher Education	74.6
Research I and II	107.0
Doctoral I and II	99.1
Master's I and II	88.5
Baccalaureate I and II	84.9
Associate of Arts	65.2
Specialized	73.7

SOURCE: United States Department of Education, National Center for Education Statistics (NCES), Integrated Postsecondary Education Data System (IPEDS), *1994 Academic Library Survey and 1993-94 Fall Enrollment Survey*

Academic Library Collections

For some time, faced with the ever-mushrooming number of publications, academic librarians have spoken of the shift from acquisition to access and the "decline of ownership" (Battin, 1989; Kyrillidou, Maxwell, Stubbs, 1996). With the development of new information age technology, the traditional notion of a library as a physical facility housing primarily paper-based materials has given way to a new image. The academic library is sometimes thought of as a range of services and collections made accessible through networks (Hughes, 1991). At the same time that this information technology revolution is occurring, new mediums of information storing and processing have meant that the categories of materials making up a library collection have been expanded. However, while new electronic mediums are growing in importance, in 1994 only a small fraction of recorded information was available in electronic format. Moreover, there are challenges in deciding which documents should be reformatted into electronic form and in providing continued access to these reformatted materials, as well as to those that will never be reformatted (Ardis, 1994).

The IPEDS Survey Form has been revised to reflect these changes over the years. In 1994 the collection categories for which counts were obtained included:

- Books and bound serials
- Government documents
- Current serials
- Microforms
- Cartographic materials
- Graphic materials
- Sound recordings
- Film and video materials
- Computer files
- Linear feet of manuscripts and archives
- Other library materials.

The number of titles were also collected for books, serials, microforms, sound recordings, films and video materials, and computer files. In 1994, the term "computer files" replaced the term machine readable materials used in earlier surveys.

Library Collection Summary

In 1994, there were about 776 million volumes of books and bound serials and 422 million titles. The category of materials with the most units was microforms with 929 million units and 158 million titles (table 4). A total of about 6.6 million paid and unpaid serial subscriptions were reported. There were about 9.3 million titles of sound recordings, 3.4 million of films and videos and about .5 million of computer files.

Table 4.—Total number of library materials held and added per full-time-equivalent (FTE) enrollment: Fiscal Year (FY) 1994

Category	Held at end of FY 1994		Added during FY1994		Number added as percent of number held
	Number in thousands	Per full-time-equivalent (FTE) enrollment	Number in thousands	Per full-time-equivalent (FTE) enrollment	
Volumes, units, and linear feet					
Books and bound serials	776,447	77.6	21,544	2.2	2.8%
Microform units	929,249	92.9	46,072	4.6	5.0
Cartographic materials	34,959	3.5	865	0.1	2.5
Graphic materials	94,531	9.5	2,721	0.3	2.9
Current paid and unpaid serial subscriptions	6,621	0.7	316	0.03	5.1
Manuscripts and archives linear feet	4,131	0.4	*	*	*
Titles					
Books and bound serials	422,267	42.2	12,831	1.3	3.0
Government documents not reported elsewhere	66,509	6.7	*	*	*
Microforms	158,345	15.8	*	*	*
Sound recordings	9,269	0.9	*	*	*
Films and video materials	3,392	0.3	364	0.04	10.7
Computer files	465	**	83	0.01	17.9

*Less than 70 percent reporting in 1994

**Less than .1 per FTE

NOTE: FTE enrollment is calculated by taking one-third of part-time enrollment and adding the amount to full-time enrollment in 3303 institutions having academic libraries.

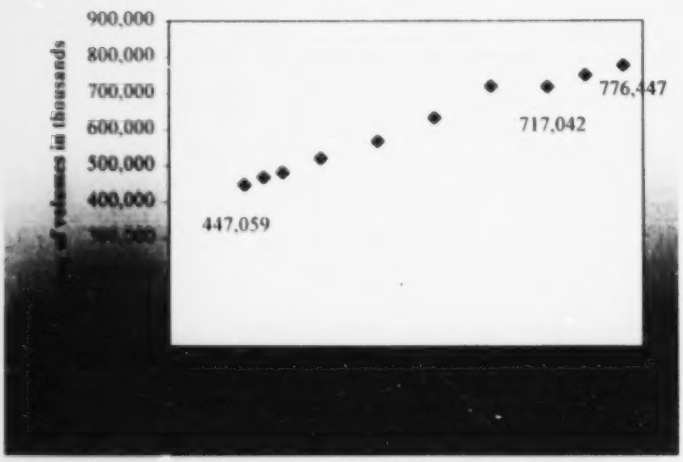
SOURCE: United States Department of Education, National Center for Education Statistics (NCES), Integrated Postsecondary Education Data System (IPEDS), *1994 Academic Library Survey and 1993-94 Fall Enrollment Survey*

Items Added as Percentage of Items Held. Looking at items added as a percentage of items held, we can see the higher relative growth in films and videos and computer files (table 4). In 1994, the number of films and video titles added was 11 percent of the number of films and video titles held. The number of computer file titles added was 18 percent of the number of computer file titles held, compared, for example, to 3 percent for book titles.

Change in Volumes Held In and Added To Collections

The number of book and bound serial volumes held and added during the year are statistics that have been consistently collected for a number of years and have had high reporting rates. In 1974, a total of 447 million volumes were counted in the nation's academic libraries and by 1994, 776 million volumes were counted (figure 4).

Figure 4.—Total number of book volumes held in academic libraries: 1974 to 1994 (volumes in thousands)

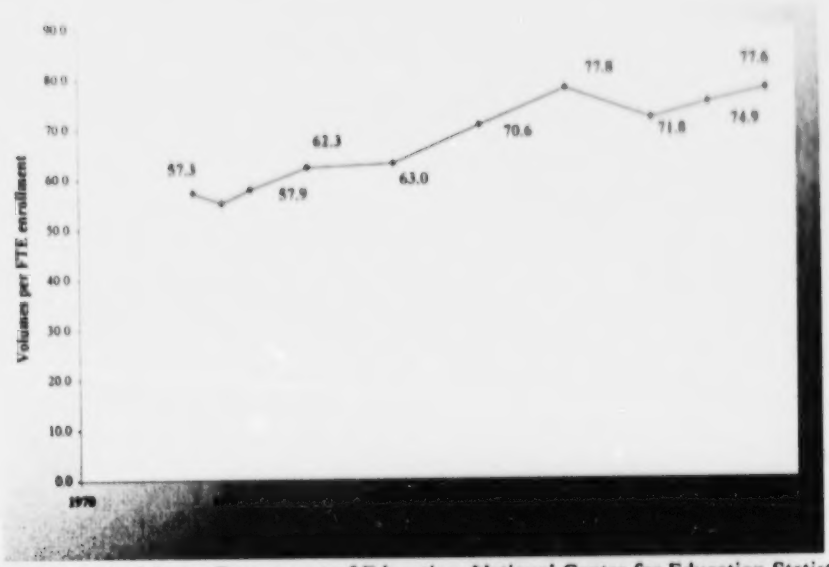


SOURCE: United States Department of Education, National Center for Education Statistics (NCES), *Digest of Educational Statistics, 1996*, table 412; Integrated Postsecondary Education Data System (IPEDS), *1994 Academic Library Survey and 1993-94 Fall Enrollment Survey*

Increase Relative to Enrollment. Between 1974 and 1994 the number of volumes counted as held in academic libraries increased by 74 percent while FTE enrollment increased by 32 percent (7.8 million to 10.3 million). This difference is reflected in the number of volumes held per FTE enrollment which increased from 57 to about 78 over the 20 year period. As can be seen from table 5 and figure 5, most of the increase in volumes per FTE enrollment occurred in the period prior to 1987. Since 1987 the number per FTE has fluctuated between 72 and 78, in part related to differences in FTE enrollment counts.

Between 1974 and 1994 FTE enrollment increased 32 percent and volumes increased by 74 percent

Figure 5.—Number of volumes held per full-time-equivalent (FTE) enrollment: 1974-1994



SOURCE: United States Department of Education, National Center for Education Statistics (NCES), *Digest of Educational Statistics, 1996*, table 412; Integrated Postsecondary Education Data System (IPEDS), *1994 Academic Library Survey and 1993-94 Fall Enrollment Survey*

Number of Volumes Added Per Year. The increase in the number of volumes held over time is the result of a rather steady number of volumes added each year rather than increases in the rate of additions. The number of volumes added each year shows no increase over the period, ranging from 23.2 million in 1974 to a low of 19.0 million in 1990 (table 5). In 1994, 21.5 million volumes were added. The number added per FTE enrollment declined from a high of 3.0 in 1974 to a low of 1.9 in 1990 (table 5 and figure 6). In 1994, there were 2.2 volumes added per FTE enrollment.

The number of volumes added per year has not increased over the last 20 years

Table 5.—Number of books and bound serial volumes held and added, and number of serial subscriptions held: 1974-1994

Year	Volumes held		Volumes added		Serial subscriptions held
	Number in thousands	Per full-time-equivalent (FTE) enrollment	Number in thousands	Per full-time-equivalent (FTE) enrollment	Number in thousands
1974....	447,059	57.3	23,242	3.0	4,434
1976....	481,442	57.9	22,367	2.7	4,670
1978....	519,895	62.3	21,608	2.6	4,775
1981....	567,826	63.0	19,507	2.2	4,890
1984....	631,727	70.6	20,658	2.3	6,317
1987....	718,504	77.8	21,907	2.4	6,416
1990....	717,042	71.8	19,003	1.9	5,749
1992....	749,429	74.9	20,982	2.0	6,966
1994....	776,447	77.6	21,544	2.2	6,621

NOTE: Figures per FTE enrollment for 1974 to 1992 were taken from the *Digest of Education Statistics, 1996*, table 412. The figures were calculated on the basis of total FTE enrollments for the various years. For 1994, the rate per FTE enrollment was calculated based on enrollment in the 3,303 academic library institutions, a base that is slightly smaller than the total IHE's (10.0 million compared to 10.3 million). The rate using the later figure would be 75.4 volumes per FTE enrollment held and 2.1 volumes per FTE enrollment added.

SOURCE: United States Department of Education, National Center for Education Statistics (NCES), *Digest of Educational Statistics, 1996*, table 412; Integrated Postsecondary Education Data System (IPEDS), *1994 Academic Library Survey, and 1993-94 Fall Enrollment Survey*

Figure 6.—Number of volumes added per year in academic libraries per full-time-equivalent (FTE) enrollment: 1974-1994

SOURCE: United States Department of Education, National Center for Education Statistics (NCES), *Digest of Education Statistics, 1996*, table 412; and Integrated Postsecondary Education Data System (IPEDS), *1994 Academic Library Survey and 1993-94 Fall Enrollment Survey*

Change Since 1990 in Volumes Held

When the set of institutions reporting in both 1990 and 1994 is compared, we see that overall the number of volumes increased by 10.9 percent and the number per FTE enrollment by 4.6 percent (table 6).

These figures, indicate that despite the growth of other mediums, the number of bound printed volumes held continued to increase at rates higher than that of enrollment. The rates of increases were highest among private Research I and II institutions. This group had increases of 19.0 percent in total volumes and 16.1 percent in volumes per FTE enrollment (table 6). However, among certain types of institutions the number of volumes per FTE enrollment actually declined between 1990 and 1994. A 5.8 and 3.7 percent decline occurred among Associate of Arts and Specialized institutions respectively and a smaller decline occurred among Baccalaureate institutions (-0.7 percent).

Table 6. —Volumes held at end of the fiscal year and volumes held per full-time-equivalent (FTE) enrollment by Carnegie Classification: 1994, and percent change since 1990

Institutional characteristic	Volumes held at end of year		Volumes per FTE Enrollment				
	Number in thousands	Percent change 1990-1994	Mean	Percent change 1990-1994	Lower quartile	Median	Upper quartile
Total	776,445	10.9%	78	4.6%	21	57	116
Public	479,695	10.1	63	3.8	16	31	62
Private	298,819	12.7	125	6.0	42	96	182
Research I and II	336,562	13.1	148	12.6	95	129	194
Public	218,460	10.5	121	10.6	89	113	136
Private	118,100	19.0	258	16.1	157	220	381
Doctoral I and II	87,077	12.8	89	10.9	61	83	116
Public	53,350	13.2	73	10.7	58	72	90
Private	33,727	12.0	134	12.1	83	98	184
Master's I and II	153,340	9.6	65	3.7	53	66	93
Public	105,520	10.0	60	4.7	47	61	76
Private	47,821	8.6	80	0.8	59	79	109
Baccalaureate I and II	95,482	8.7	118	-0.7	75	115	176
Public	10,899	5.0	60	-4.8	45	56	81
Private	84,583	9.2	135	-0.1	89	126	185
Associate of Arts	51,226	5.1	16	-5.8	11	18	30
Public	47,053	5.9	16	-5.2	12	18	27
Private	4,173	-4.5	27	-7.2	7	18	63
Specialized	44,414	6.7	118	-3.7	42	116	326
Public	10,415	*	94	-10.7	54	89	156
Private	33,999	9.4	128	-0.7	39	130	387
Not classified	8,346	19.0	69	153.0	11	27	73

NOTE: Totals reported for 1994 include imputed data to account for nonresponse. Calculations of percent change include only those institutions reporting in both 1994 and 1990 and are reported only for variables in which 70 percent or more of libraries reported for the item in both 1990 and 1994. FTE enrollment is calculated by taking one-third of part-time enrollment and adding the amount to full-time enrollment. For calculation of percent change, actual FTE enrollments for 1990 and 1994 for institutions included were used in tabulations. Details for volumes held may not sum to totals due to rounding

SOURCE: United States Department of Education, National Center for Education Statistics (NCES), Integrated Postsecondary Education Data System (IPEDS), *1994 Academic Library Survey, 1990 Academic Library Survey, and 1989-90 and 1993-94 Fall Enrollment Surveys*

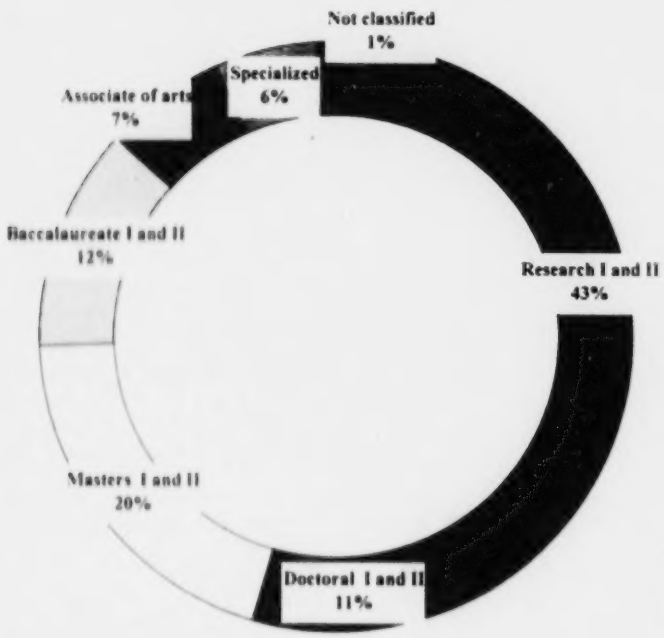
Differences in Volumes per FTE Enrollment

In 1994 the overall number of volumes per FTE enrollment was 78 and the median per institution was 57 (table 6). The numbers range widely by institution type going from 16 per FTE enrollment in public Associate of Arts institutions to 258 in private Research I and II institutions. The median per FTE enrollment per institution ranged from 18 in both public and private Associate of Arts institutions to 220 in private Research I and II institutions (table 6).

The number of volumes held per FTE enrollment ranges from 16 in public Associate of Arts institutions to 258 in private Research I and II institutions

Figure 7.—Percent distribution of volumes held at the end of the year and distribution of full-time-equivalent (FTE) enrollment by Carnegie Classification: 1994

Distribution of volumes held



Distribution of FTE enrollment: 1994

All Institutions of Higher Education	100%
Research I and II	23%
Doctoral I and II	10%
Master's I and II	24%
Baccalaureate I and II	8%
Associate of Arts	32%
Specialized	4%
Not classified	1%

SOURCE: United States Department of Education, National Center for Education Statistics, Integrated Postsecondary Education Data System (IPEDS), *1994 Academic Library Survey*, and 1993-*94 Fall Enrollment Survey*

Distribution of Volumes by Type of Institution

As can be seen from figure 7 and table 7 over 40 percent of the total volumes held were held in Research I and II institutions. Traditionally research institutions have maintained the largest collections to serve the needs of graduate students and research faculty. Research I and II institutions enroll about 23 percent of the total FTE enrollment (figure 7). The Associate of Arts institutions, enrolling 32 percent of the FTE students, have only 7 percent of the volumes held.

Four year college library standards recommend a basic collection of 85,000 with additional volumes based on enrollment, faculty, number of majors, and types of degrees awarded

Number of Volumes Per Institution and Academic Library Standards

The mean number of volumes held per institution, ranges from 65,295 volumes in institutions with less than 1,500 students to over 909,655 in institutions with 5,000 or more (table 7). The 1995 Edition of *Standards for College Libraries* prepared by the Association of College and Research Libraries (ACRL)/ College Library Section (CLS) Standards Committee gives a formula for estimating the number of volumes needed. There is also a grading system based on the percent of the suggested number of volumes held by the institution. This formula suggests that the basic collection should have at least 85,000 volumes and that there be an additional 15 volumes per FTE enrollment and an additional 100 volumes per FTE faculty. In addition the formula states there should be 350 volumes per undergraduate major and minor field and additional allowances for each master's (6,000), specialist (3,000), and doctoral field (6,000).

Thus for example, a baccalaureate institution with 1,000 FTE undergraduates, 10 major fields, and 50 faculty should have about 108,000 volumes. A masters level institution with 10,000 FTE enrollment, 250 faculty, 15 majors and 8 masters majors should have about 300,000 volumes. A doctoral granting institution with 20,000 students, 350 faculty, 15 majors and 10 masters and 8 Ph.D. fields should have about 509,000 volumes. One can see from these examples and the numbers in table 7 that smaller colleges are less likely on average to meet the standard, while Research universities easily exceed the standard.

Two year college library standards recommend a minimum of 30,000 volumes for institutions with under 1,000 FTE enrollment and 170,000 for those with FTE enrollments of 17,000-19,000

The standards for Community Colleges awarding associate degrees are contained in the publication *Standards for Community, Junior, and Technical College Learning Resource Programs*, published in 1994 and prepared by a joint committee of the Association for Educationa. Communications and Technology (AECT) and the ACRL. The recommendations for number of volumes are directly linked to institution size and range from 30,000 for institutions under 1,000 to 170,000 for those with 17,000 to 19,000 FTE students. One can see from table 7 that the Associate of Arts institutions with

a mean of 43,597 volumes held and a median of 36,500 volumes held just exceed the minimum standard for the smallest category of institutions those of 1,000 enrollment. The average FTE enrollment of Associate of Arts institutions in 1994 was 2,670 (calculated from appendix table A-4 and table 1).

Table 7.—Mean and median number of volumes per institution and percent distribution of volumes held by institution control, size, and Carnegie Classification: Fiscal Year (FY) 1994

Institution characteristic	Total number of libraries	Total volumes at end of year in thousands	Per institution	Median per institution	Percent of total volumes held
All	3,303	776,447	235,073	71,017	100%
Control					
Public	1,548	449,763	290,544	65,956	57.9
Private	1,755	326,685	186,145	77,700	42.1
Size (FTE enrollment)					
Less than 1,500	1,754	114,527	65,295	37,413	14.8
1,500-4,999	984	147,965	150,371	85,491	19.1
5,000 or more	565	513,955	909,655	453,308	66.2
Carnegie Classification (1994)					
Research I and II	125	336,562	2,692,497	2,164,156	43.3
Doctoral I and II	110	87,077	791,608	692,386	11.2
Master's I and II	518	153,341	296,025	234,122	19.7
Baccalaureate I and II	606	95,482	157,561	116,085	12.3
Associate of Arts	1,175	51,226	43,597	36,500	6.6
Specialized	556	44,414	79,881	47,032	5.7
Not classified	213	8,346	39,181	12,451	1.1

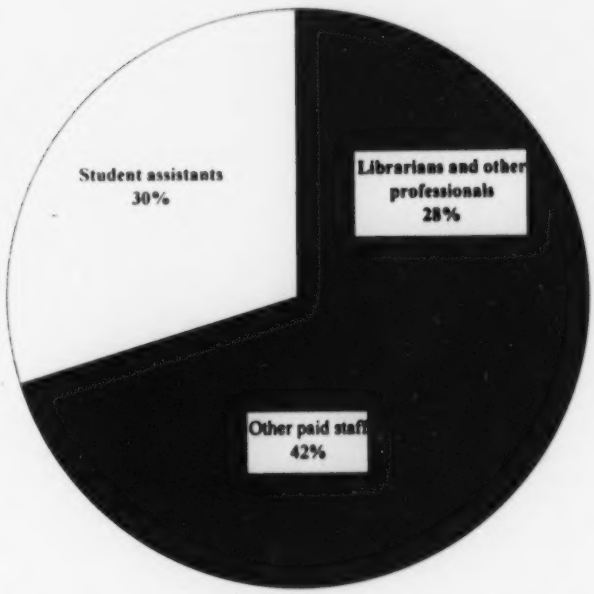
NOTE: Details for total volumes held may not sum to total due to rounding

SOURCE: United States Department of Education, National Center for Education Statistics (NCES), Integrated Postsecondary Education Data System (IPEDS), *1994 Academic Library Survey*

Academic Library Staff

The development of electronic information databases and automation of many library technical functions have resulted in the redefining of a profession and a change in the composition of staff in academic libraries. Some tasks, previously handled by professional librarians, have been assigned to newly emerging support staff occupations. At the same time, the evolution of information technology requires sophisticated librarians who can provide enhanced information services (Oberg, 1992; Park and Riggs, 1991; Cravey, 1991). Librarians have always served as the link between information resources and consumers of information. The academic librarian in the information age will spend more time instructing students in the skills of selecting and reviewing information from an ever expanding information base. In addition the library and librarians will maintain the essential infrastructure to accommodate the continuously evolving information environment.

Figure 8.—Percent distribution of academic library full-time-equivalent (FTE) staff by type of staff: 1994



SOURCE: United States Department of Education, National Center for Education Statistics (NCES), Integrated Postsecondary Education Data System (IPEDS), *1994 Academic Library Survey*

Distribution of Full-Time-Equivalent (FTE) Library Staff by Type

In 1994, about 95,843 FTE staff were employed in academic libraries.[2] Of the total FTE library staff, 28 percent were librarians or other professional staff. Forty-two percent were other paid staff and 30 percent were student assistants (figure 8).

The proportion of FTE library staff who are librarians and other professional staff does not vary greatly by type of library (see appendix table B-8). The proportion only ranges from 27 percent in Research I and II and Baccalaureate I and II institutions to 32 percent in Specialized institutions. By control, the proportion also does not vary much, being 29 percent in private and 27 percent in public institutions. However, smaller institutions were somewhat more likely to use student assistants than larger institutions. In institutions of less than 1,500 FTE enrollment 36 percent of the FTE library staff were student assistants, while in institutions of 5,000 FTE enrollment or more, 28 percent of the FTE library staff were student assistants (appendix table B-8).

Full-Time-Equivalent (FTE) Staff per 1,000 FTE Enrollment

While the relative distribution of staff between professional, non-professional, and student assistants does not vary greatly by type of institution, the number of FTE library staff per 1,000 FTE enrollment, is considerably higher in private than in public institutions. For example, in private Research I and II institutions the number of FTE library staff per 1,000 FTE enrollment was almost double that of public Research I and II institutions (24.3 in private compared with 12.2 public) (table 8). Similarly in private Baccalaureate I and II institutions there were 14.6 FTE staff per 1,000 FTE enrollment, while in public Baccalaureate I and II institutions there were 8.1 FTE staff per 1,000 FTE enrollment.

Change in Staff Over Time Since 1974

Figure 9 graphs FTE staff for the total (excluding student assistants but including contributed services staff), for other non-professional staff, and for librarians and other professional staff from 1974 to 1994. FTE data on student assistants is available and graphed only for the period after 1990.

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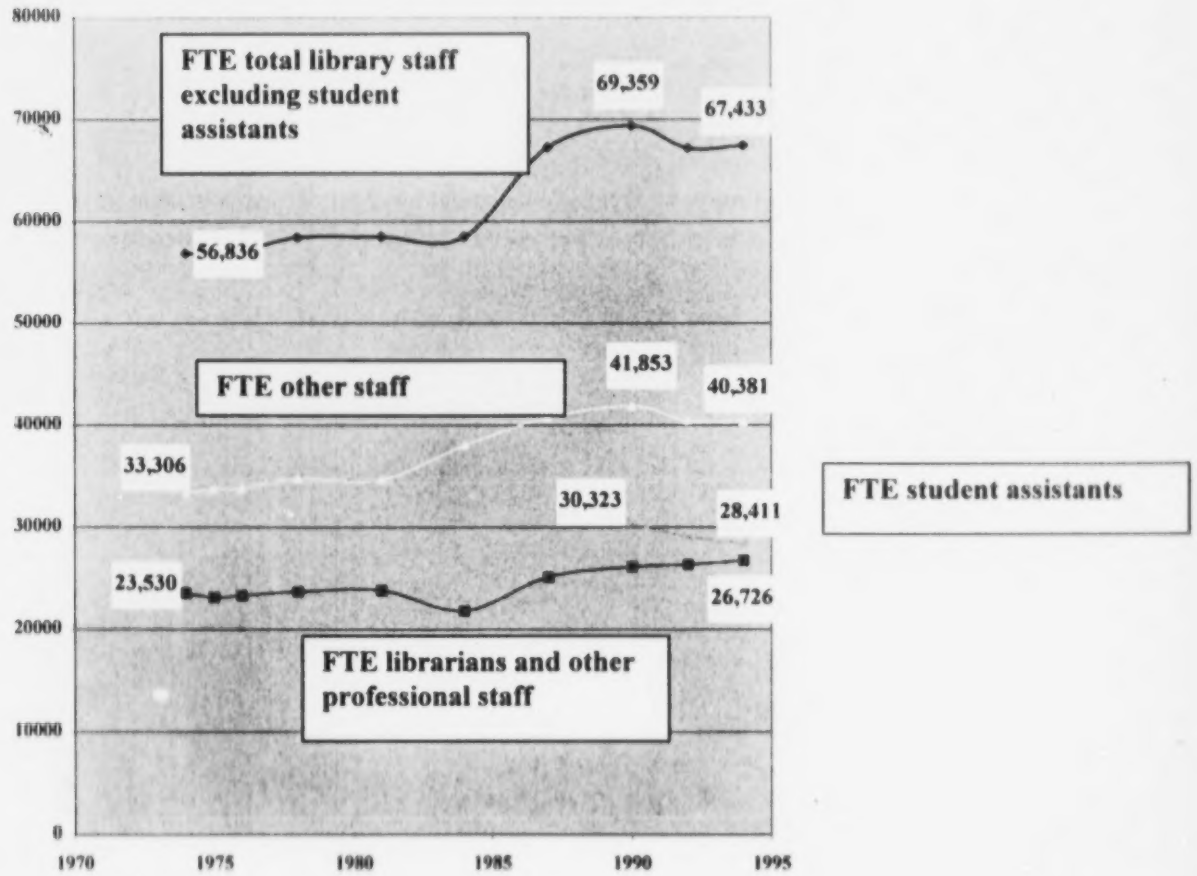
[2]Academic library staff were reported in the survey form in full-time-equivalents (FTE's)

Change in Staff Totals Excluding Student Assistants. Between 1967 (not shown on graph) and 1977 the total number of non-student assistant library FTE staff grew from 43,500 in 1967 to 57,087 in 1977 (Beasley, 1979). By 1988 this number was 67,300 and in 1990 the number was 69,359. However, between 1990 and 1992 declines in library staffing were reported (Williams, 1994), with the total number including contributed services staff being 67,166. The comparable number in 1994 was 67,433 (figure 9).

Figure 9.—Number of academic library full-time-equivalent (FTE) staff: 1974-1994



SOURCE: United States Department of Education, National Center for Education Statistics (NCES), *Digest of Education Statistics, 1996*, table 412; and Integrated Postsecondary Education Data System (IPEDS), *1994 Academic Library Survey*

Change in Staff Including Student Assistants. Comparable data on the number of FTE student assistants is available only since 1990. When the total library staff are considered (including student assistants) for institutions reporting in both 1990 and 1994, we see that the total numbers have declined by 0.1 percent since 1990 (table 8). When considered per 1,000 FTE enrollment there were declines of 5.9 percent between 1990 and 1994 (table 8). These declines occurred at both public and private institutions. The largest declines were at Baccalaureate I and II institutions and at Associate of Arts institutions.

Table 8.—Total academic library staff, number per 1,000 full-time-equivalent (FTE) enrollment, and percent change between 1990 and 1994 by control and Carnegie Classification

Institutional characteristic	Total staff including student assistants		Total staff including student assistants per 1,000 FTE enrollment				
	Number	Percent change 1990-1994	Mean	Percent change 1990-1994	Lower quartile	Median	Upper quartile
Total	95,843	-0.1%	9.6	-5.9%	5.3	8.9	15.9
Public	58,457	-0.4	7.7	-6.1	4.0	6.0	8.7
Private	37,386	0.3	15.6	-5.4	8.7	13.6	22.7
Research I and II	33,258	0.3	14.7	-0.7	10.0	13.3	19.1
Public	22,159	-1.2	12.3	-1.3	9.5	11.9	14.4
Private	11,099	2.0	24.3	0.2	17.1	23.2	32.7
Doctoral I and II	10,444	3.6	10.	1.6	7.8	9.6	14.1
Public	6,538	3.3	9.0	0.9	7.3	9.0	10.6
Private	3,907	4.2	15.6	3.4	9.5	14.0	20.2
Master's I and II	19,250	-1.3	8.2	-7.2	6.5	8.4	11.2
Public	12,946	-2.2	7.4	-7.6	6.0	7.1	9.1
Private	6,304	0.3	10.6	-6.8	7.9	10.2	13.6
Baccalaureate I and II	10,612	-5.0	13.1	-12.6	9.1	12.7	18.6
Public	1,484	*	8.1	-8.3	6.0	8.0	10.3
Private	9,128	-5.7	14.6	-13.2	9.7	14.0	19.5
Associate of Arts	13,646	-1.4	4.3	-11.5	3.3	4.9	7.5
Public	12,484	-1.1	4.3	-11.4	3.2	4.6	6.3
Private	1,162	-4.9	7.5	-11.6	4.1	8.7	15.8
Specialized	6,853	6.6	18.2	-2.0	11.7	20.5	39.3
Public	1,870	5.1	17.0	-3.6	10.6	19.4	27.4
Private	4,984	7.4	18.7	-1.3	12.0	20.8	41.4
Not classified	1,779	67.3	14.7	60.6	4.3	9.0	21.7

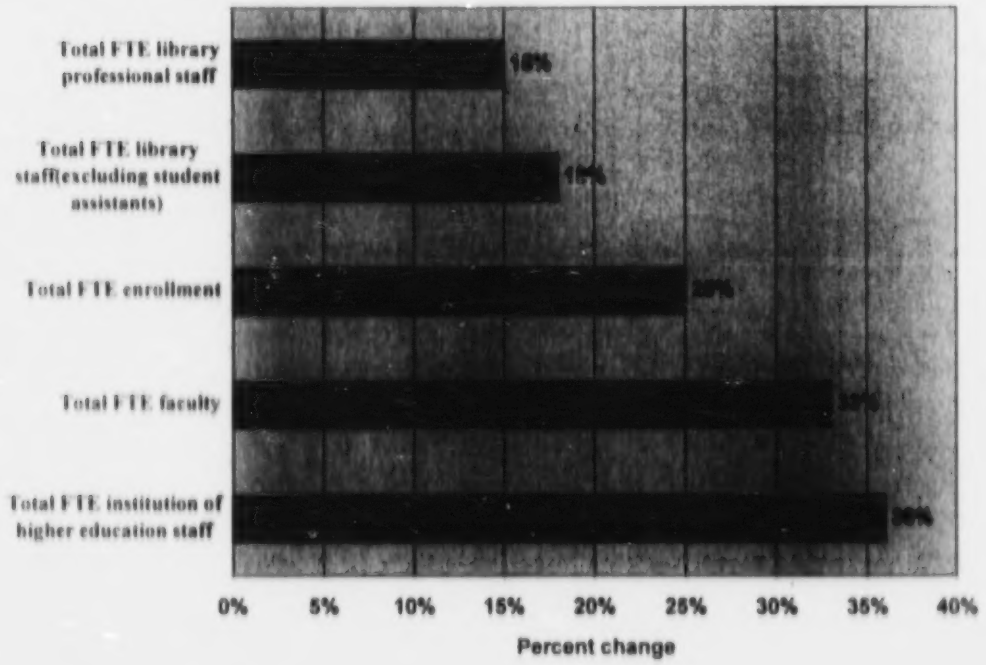
*Less than .5 percent

SOURCE: United States Department of Education, National Center for Education Statistics (NCES), Integrated Postsecondary Education Data System (IPEDS), *1994 Academic Library Survey, 1990 Academic Library Survey, and 1993-94 Fall Enrollment Survey*

Changes in Library Staff Relative to Total Higher Education Staff and Enrollment

Changes in library staff since the mid-1970's have not kept pace with enrollment and lag behind the increases experienced by the total Institution of Higher Education (IHE) staff. Over the period since 1976 to 1993 (two dates for which comparable figures on total FTE IHE staff are available), the total full-time-equivalent number of staff in IHE's increased from 1.86 million to 2.60 million (36 percent) and FTE enrollment from 8.31 million to 10.36 million (25 percent). FTE faculty increased by 33 percent (calculated from *Fall Staff in Postsecondary Institutions, 1993*). In contrast, the FTE number of library staff (excluding student assistants) increased by 18 percent, and FTE library professional staff increased by 15 percent over about the same period (1976 to 1994) (figure10).

Figure 10.—Percent change in full-time-equivalent (FTE) academic library staff and institution of higher education FTE enrollment and staff : 1976-1993, 1994

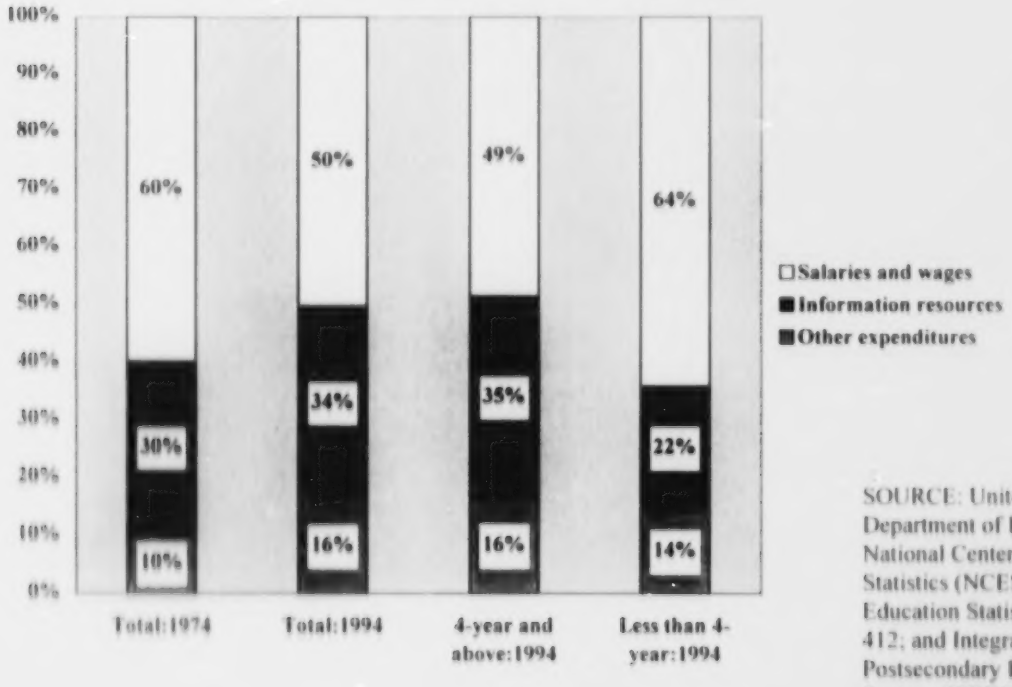


SOURCE: United States Department of Education, National Center for Education Statistics (NCES), Integrated Postsecondary Education Data System (IPEDS), *1994 Academic Library Survey and Fall Staff in Postsecondary Institutions, 1993, figure 3.*

Academic Library Expenditures

In 1994, academic library operating expenditures totaled just over 4 billion dollars. Library expenditures cover a wide range of materials and activities ranging from salaries and wages to postage for document delivery. In recent years the categories have been revised to include additional categories for computer related items and for the expenditures for electronic information resources. The categories for which separate expenditure information was collected in 1994 are listed in table 9.

Figure 11.—Percent distribution of academic library operating expenditures by type and institution level: 1974 and 1994



SOURCE: United States Department of Education, National Center for Education Statistics (NCES), Digest of Education Statistics, 1996, table 412; and Integrated Postsecondary Education Data System (IPEDS), *1994 Academic Library Survey*

Table 9.—Academic library operating expenditures in 1994, and percent distribution of expenditures in 1990 and 1994 by type of expenditures

Operating Expenditures	Total amount in thousands 1994	Amount per full-time-equivalent (FTE) enrollment 1994	Percent distribution of total amount 1994	Percent distribution of total amount 1990
Total	$4,013,333	**$402.18**	100%	100%
Salaries and wages	2,021,233	**202.55**	50.4	52.0
Information resources	1,348,932	**135.18**	33.6	34.1
Current serial subscriptions	690,410	**69.19**	17.2	16.9
Books and bound serials	442,495	**44.34**	11.0	12.3
Microforms	62,421	**6.26**	1.6	1.0
Audi-visual	28,753	**2.88**	0.7	0.7
Document delivery	12,238	**1.23**	0.3	0.3
Computer files/search services	70,792	**7.09**	1.8	2.3
Other information resources	41,823	**4.19**	1.0	0.6
Furniture and equipment	55,915	**5.60**	1.4	1.5
Computer hardware and software	128,128	**12.84**	3.2	1.9
Bibliographic utilities, networks, consortia	81,106	**8.13**	2.0	1.1
Preservation	46,554	**4.67**	1.2	1.1
Other operating expenditures	331,463	**33.22**	8.3	8.2

NOTE: Amounts used for percent distribution calculation includes imputed data in both 1990 and 1994. FTE enrollment is calculated by taking one-third of part-time enrollment and adding the amount to full-time enrollment.

SOURCE: United States Department of Education, National Center for Education Statistics (NCES), Integrated Postsecondary Education Data System (IPEDS), *1994 Academic Library Survey; 1990 Academic Library Survey; and 1993-94 Fall Enrollment Survey*

Distribution of Library Operating Expenditures

As one can see from figure 11 and table 9 salaries and wages account for half (50 percent) of all operating expenditures. The proportion of expenditures going to salaries and wages has declined over the last 20 years going from 60 percent in 1974 to 50 percent in 1994 (figure 11 and NCES *Digest of Education Statistics, 1996,* table 412).

The percent of operating expenditures going to salaries and wages was 60 percent in 1974 and 50 percent in 1994

The percent of the total going to salaries and wages did not vary substantially by public or private institutional control—being 52 percent in public and 48 in private institutions. However, less than 4-year institutions have a higher proportion of their expenditures going for salaries (64 percent) than do the other types of institutions (figure 11 and appendix table B-10).

As one can see from table 9, the detailed expenditure distributions in 1994 and 1990 are very similar to each other. In 1994 the proportion of expenses going for new electronic resources and services was somewhat higher overall than in 1990. If one combines computer files and searches, computer hardware and software, and bibliographic utilities, networks and consortia, 7.0 percent went for these categories in 1994 and 5.3 in 1990 (table 9). Books and bound serials were a slightly smaller proportion of the total in 1994 than in 1990, and microforms a slightly larger proportion in 1994 (table 9).

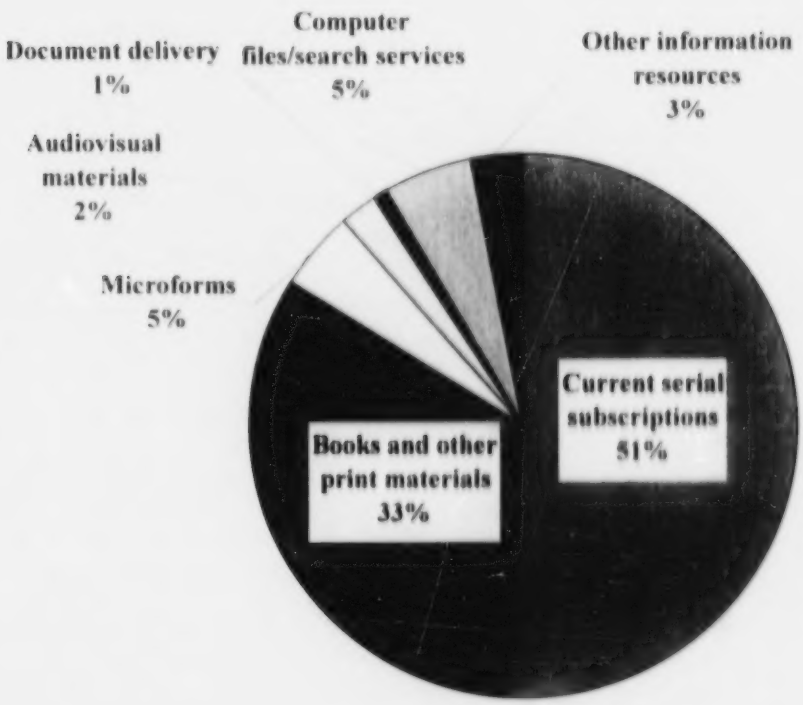
The percent of expenditures going to new electronic resources and services was about 7.0 percent in 1994 and 5.3 percent in 1990

Distribution of Information Resources Expenditures

When one considers the distribution for information resources (figure 12), one sees the dominance of serials expenditures which accounted for fully half (51 percent) of information resources expenditures. A number of library expenditure analyses have noted the high proportion of information resource expenditures going to serials and that unit costs have increased over the last ten years. Statistics reported for research libraries by the Association of Research Librarians (ARL) indicated that between 1986 and 1995 ARL libraries doubled expenditures for serials while buying 8 percent fewer titles (Kyrillidou, Maxwell and Stubbs, 1996).

Serial expenditures account for one-half of information resource expenditures

Figure 12.—Distribution of academic library expenditures for information resources: 1994



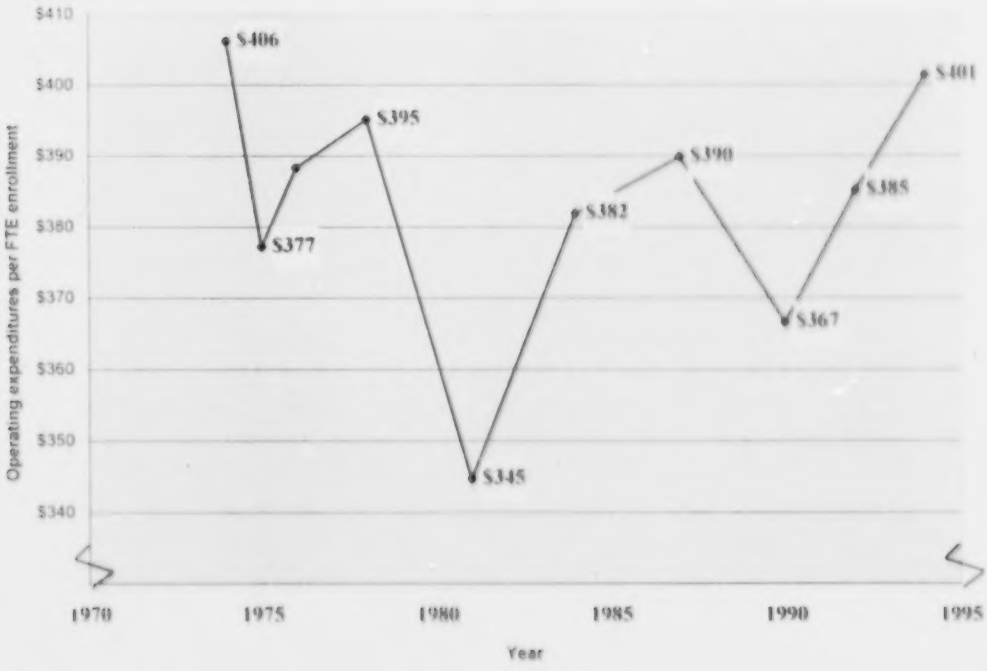
SOURCE: United States Department of Education, National Center for Education Statistics (NCES), Integrated Postsecondary Education Data System (IPEDS), *1994 Academic Library Survey*

Change in Total Operating Expenditures and Operating Expenditures Per Full-Time-Equivalent (FTE) Enrollment

In current dollars, total operating expenditures have gone from $1.09 billion in 1974 to $4.01 billion in 1994. In constant 1994 dollars, total operating expenditures have gone from $3.17 billion to $4.01 billion (tabulated from NCES Library Statistics of Colleges and Universities, various years and IPEDS Academic Library Survey). Public academic libraries had 60 percent of the expenditures and private 40 percent. Research I and II institutions account for 40 percent of the total expenditures. Associate of Arts institutions account for 11 percent. Between 1990 and 1994 overall library expenditures increased by 10.7 percent in constant dollars (table 10).

Expenditures Per Full-Time-Equivalent (FTE) Enrollment. In constant dollars, expenditures per FTE enrollment were $406 in 1974 and $401 in 1994. The lowest amount per FTE enrollment occurred in 1981 when constant dollar expenditures were $345 and in 1990 when expenditures were to $367 (figure 13).

Figure 13.—Academic library operating expenditures per full-time-equivalent (FTE) enrollment in constant (1994) dollars: 1974-1994



NOTE: Constant dollars calculated based on consumer price index as published in *1996 US Statistical Abstract*, table 745.

SOURCE: United States Department of Education, National Center for Education Statistics (NCES), *Digest of Education Statistics, 1996, table 412, and* Integrated Postsecondary Education Data System (IPEDS), *1994 Academic Library Survey and 1993-94 Fall Enrollment*

Table 10.—Total and per full-time-equivalent (FTE) academic library operating expenditures, and percent change between 1990 and 1994 in constant dollars by control and Carnegie Classification

Institutional characteristics	Total amount		Per full-time-equivalent (FTE) enrollment				
	Amount in Thousands	Percent change 1990-94 in constant dollars	Mean	Percent change 1990-94 in constant dollars	Lower quartile	Median	Upper quartile
Total	$4,013,332	10.7%	$401	4.7%	$169	$291	$503
Public	2,441,579	8.0	322	2.1	137	209	313
Private	1,571,753	15.8	658	9.5	253	399	742
Research I and II	1,622,321	12.2	715	12.0	474	621	920
Public	1,033,200	10.9	571	11.3	447	552	663
Private	589,100	14.6	1,288	11.7	834	1,164	1,795
Doctoral I and II	470,560	9.6	480	8.2	316	444	671
Public	287,930	9.5	395	7.4	304	356	470
Private	182,630	9.8	728	10.6	455	649	817
Master's I and II	750,136	5.5	319	-0.1	251	307	393
Public	527,530	1.9	300	-3.1	239	290	347
Private	222,600	16.7	373	8.6	270	340	430
Baccalaureate I and II	369,690	14.9	457	6.1	275	389	550
Public	54,040	9.1	295	-0.8	217	274	358
Private	315,650	15.9	505	7.6	293	416	591
Associate of Arts	443,770	7.3	140	-3.3	103	148	215
Public	414,190	6.4	142	-4.3	110	151	205
Private	29,579	29.6	191	20.9	96	190	318
Specialized	297,180	18.9	789	7.6	338	685	1673
Public	94,701	14.9	859	2.4	396	703	1363
Private	202,480	22.1	760	11.3	336	680	1736
Not Classified	59,677	27.7	493	23.6	135	244	805

NOTE: Amounts reported for 1994 include imputed data to account for nonresponse. Calculations of percent change include only those institutions reporting in both 1994 and 1990 and are reported only for variables in which 70 percent or more of libraries reported for the item in both 1990 and 1994. FTE enrollment is calculated by taking one-third of part-time enrollment and adding the amount to full-time enrollment. For calculation of percent change, actual FTE enrollments for 1990 and 1994 for institutions included were used in tabulations. Details for amounts in thousands may not sum to totals due to rounding. Constant dollars calculated based on consumer price index as published in 1996 US Statistical Abstract, table 745.

SOURCE: United States Department of Education, National Center for Education Statistics (NCES), Integrated Postsecondary Education Data System (IPEDS); *1994 Academic Library Survey, 1990 Academic Library Survey, and 1993-94 Fall Enrollment Survey*

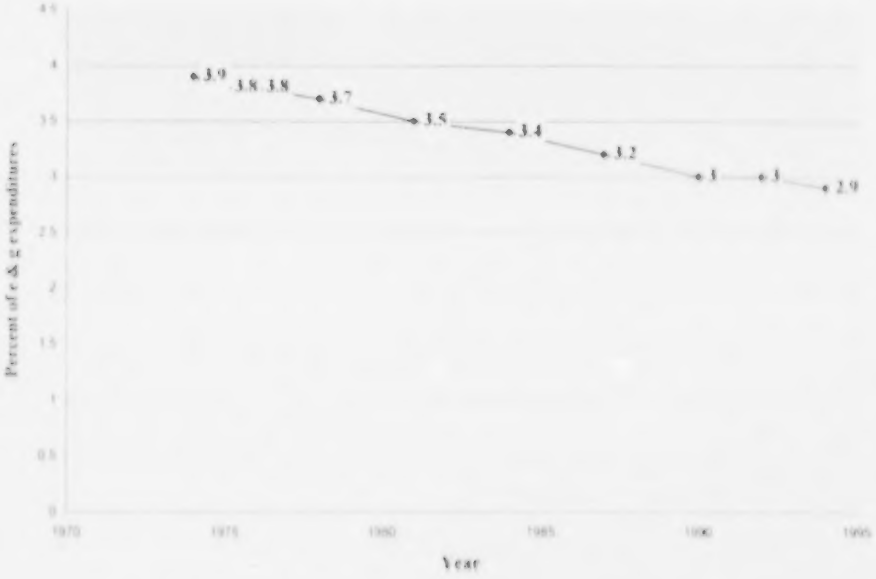
Between 1990 and 1994 overall expenditures per FTE enrollment increased by 4.7 percent in constant dollars. However, Associate of Arts institutions experienced a decline of 3.3 percent over the period (table 10).

Expenditures per full-time-equivalent (FTE) enrollment ranged from $142 per FTE enrollment in public Associate of Arts institutions to $1,288 in private Research I and Research II institutions (table 10). Expenditures per FTE enrollment in private institutions were about double those in public institutions ($658 and $322 respectively). Median expenditures per institution also showed an almost twofold difference between public and private institutions. The median expenditures per FTE were $291 overall and $209 in public and $399 in private institutions (table 10).

Academic Library Operating Expenditures as a Percent of Total Educational and General (E&G) Expenditures

Examination of the data for the total group of academic libraries for the period 1974-1994 shows that the percentage of total institutional E&G expenditures spent by libraries declined from 3.9 in 1974 to 2.9 in 1994 (figure 14).

Figure 14.—Academic library operating expenditures as a percent of total Education and General (E&G) expenditures: 1974-1994



SOURCE: United States Department of Education, National Center for Education Statistics (NCES), *Digest of Education Statistics, 1996, table 412, and* Integrated Postsecondary Education Data System (IPEDS), *1994 Academic Library Survey and 1993-94*

Table 11.—Academic library operating expenditures as a percent of total Education and General (E&G) expenditures; and percent change between 1990 and 1994 by control and Carnegie Classification

Institutional characteristics	Percent of total E&G expenditures 1994	Percent change in percent of total E&G 1990-94	Lower quartile	Median	Upper quartile
Total	2.9%	-2.3%	2.0%	2.8%	3.9%
Public	2.7	-2.8	1.9	2.6	3.4
Private	3.1	-1.8	2.1	3.0	4.5
Research I and II	2.9	2.5	2.4	2.8	3.3
Public	2.8	4.0	2.4	2.8	3.3
Private	3.0	-0.3	2.0	2.9	3.4
Doctoral I and II	3.5	-2.5	2.5	3.3	4.1
Public	3.4	-1.3	2.7	3.2	3.7
Private	3.7	-4.7	2.2	3.7	4.3
Master's I and II	3.1	-6.6	2.4	3.0	3.8
Public	3.3	-7.5	2.7	3.3	3.9
Private	2.7	-2.7	2.2	2.7	3.2
Baccalaureate I and II	3.2	-3.4	2.4	3.0	3.7
Public	3.4	-5.6	2.8	3.4	4.1
Private	3.2	-3.0	2.3	2.9	3.6
Associate of Arts	2.2	-9.2	1.6	2.3	3.1
Public	2.2	-9.6	1.6	2.3	3.0
Private	2.0	-0.7	1.2	2.1	3.5
Specialized	2.5	-2.9	2.3	4.1	8.5
Public	1.5	-5.1	1.5	2.0	3.3
Private	3.7	-2.0	2.6	4.6	9.1
Not classified	4.2	21.5	1.5	2.5	7.7

NOTE: Figures for 1994 include imputed data to account for nonresponse. Calculations of percent change include only those institutions reporting in both 1994 and 1990 and are reported only for variables in which 70 percent or more of libraries reported for the item in both 1990 and 1994. Actual E&G expenditures for 1990 and 1994 for institutions included were used in calculations.

SOURCE: United States Department of Education, National Center for Education Statistics (NCES), Integrated Postsecondary Education Data System (IPEDS), *1994 Academic Library Survey, 1990 Academic Library Survey, and 1990 and 1994 Finance Surveys*

Using the set of institutions reporting in both 1990 and 1994, we see that there was a decline of 2 percent in the percent of the total E&G expenditures spent by academic libraries over the 1990-94 period (table 11). A decline was experienced by all categories of libraries except those in the category public Research I and II and the "not classified" category (table 11).

As part of the ongoing development of standards for academic libraries, the Association of College and Research Libraries (ACRL) has established standards on the percent of total institution expenditures that should go to academic libraries for two of the three categories of academic libraries. The *Standards for Community, Junior, and Technical Learning Resource Programs* and the *Standards for College Libraries* both established a standard that academic libraries should receive 6 percent of their university's total budget. The *Standards for University Libraries* does not mention a specific percentage, however the 6 percent goal is often also cited for this group as a target. Data on research libraries has shown that this goal has never been reached and in fact that that the share has declined over the period of 1982-1992 (Goudy, 1993; Cummings et. al. 1992).

Summary/Conclusion

In the first half of the 1990s, a time of rapid change in methods of information dissemination, academic library circulation increased modestly. There were much larger relative increases in the use of interlibrary loans reflecting the increasingly open computerized access to catalogues. While the number of book volumes held in collections continued to increase, the number per FTE enrollment has not increased since a peak reached in 1987. Information resources such as computer files and films and videos had the highest ratios of items added to items held reflecting the relative newness of these categories of materials and building of collections in these areas. There were large differences in the number of volumes per FTE enrollment between institutions by Carnegie Classification. Volumes per FTE enrollment ranged from 16 in Associate of Arts institutions to 148 in Research I and II institutions. Associate of Arts institutions have 7 percent of the volumes while having almost one third of FTE enrollment (32 percent).

In a period of increasing library automation and change in library staff roles, the actual total number of FTE academic library staff declined slightly between 1990 and 1994 (reflecting a trend also observed in 1992; Rossi and Daugherty, 1997). The number per 1,000 FTE enrollment declined by almost 6 percent. While declines in the total number of academic library staff have occurred only recently, over the last 20 years, increases in academic library staff have not kept pace with those of the total IHE staff. The number of professional staff in libraries has remained largely stable over the period between 1989 and 1994.

Academic library operating expenditures totaled 4 billion dollars in 1994. The distributions of operating expenditures by category of expenditure in 1990 and 1994 were very similar except for a small increase in the proportion going to electronic related services and microforms and small declines in the proportion going to salaries and wages and book volumes. Serials expenditures continue to dominate the distribution of information resources expenditures. The amount of expenditures per FTE enrollment in constant dollars was about the same in 1994 as 20 years earlier, in 1974, but increased over 1990 by about 5 percent. Academic library expenditures as a percent of total institution expenditures have ranged between 3.9 and 2.9 percent between 1974 and 1994, falling short of the 6 percent ACRL recommended and the percentage appears to be decreasing over time. There were large differences in the expenditures per FTE enrollment by Carnegie Classification. For example, expenditures per FTE enrollment were $140 in Associate of Arts institutions and $715 in Research I and II institutions. Similarly, the number of FTE staff per 1,000 FTE enrollments was 4.3 in Associate of Arts institutions and 14.7 in Research I and II institutions.

These data indicate that the changes in information technology were beginning to have small impacts on academic library statistics in areas of types of services, staff numbers, collection additions, and distribution of expenditures. Future surveys will provide more information on the continued extent of these changes.

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Appendix A: Methodology

Scope

The Academic Libraries survey was mailed in August 1994 to all institutions of higher education (IHE's) and to other postsecondary institutions in the United States that had one or more instructional programs of 4 years or more. While the response among the 3,639 institutions of higher education (IHE's) was 94 percent, the response from the other postsecondary institutions (about 300) was less than 50 percent. Due to low response, we cannot produce statistically acceptable estimates for this group of other postsecondary institutions. Thus the Academic Library file and this report are limited to Institutions of Higher Education (IHE's).

Of the 3,639 higher education institutions, there were 132 institutions that did not have their own library but shared a library with one or more of 70 other institutions. Those 132 institutions were excluded from the survey. There were also 204 institutions that were found to be out of scope because they did not have an academic library as defined by the survey. Thus there were 3,303 academic libraries in the 50 states and District of Columbia.

An Academic Library is defined as an entity at a postsecondary institution that provides all of the following:

- Organized collection of printed or other materials, or a combination thereof;
- A staff trained to provide and interpret such materials as required to meet the informational, cultural, recreational, or educational needs of clientele;
- An established schedule in which services of the staff are available to clientele;
- The physical facilities necessary to support such a collection, staff, and schedule.

This definition includes libraries that are part of learning resource centers. The library must be operated by a postsecondary education institution.

Data Collection Procedures

The Academic Library Survey data are collected and processed by the Census Bureau for NCES. In 1990, an NCES/IPEDS academic library survey improvement project was begun with the assistance of the National Commission on Libraries and Information Science (NCLIS) and the American Library Association's Office of Research and Statistics (ALA-ORS). The project identified a librarian in each state to work with the Integrated Postsecondary Education Data System (IPEDS) Coordinators in submitting library data to NCES. For the 1990, 1992, and 1994 data

collections many of those library representatives took major responsibility for collecting data in their state. Others were available to promote prompt responses from librarians and to assist in problem resolution when anomalies were discovered in completed questionnaires.

The project also assisted NCES in developing microcomputer software packages prepared for use by states in reporting library data to NCES. The software package was named Input and Data Editing for Academic Library Statistics (IDEALS). Academic librarians within each state completed hard copy forms as in the past and returned them to the state's library representative or the IPEDS Coordinator. States were given the option of submitting the library forms to NCES, but were encouraged to enter those data into IDEALS and submit the data on diskette to NCES.

The IDEALS package features some internal consistency edit checks as well as a few range checks and summation checks. Library representatives at the state level could run edit/error reports and make corrections before submitting the data on diskette to NCES.

Editing and Imputation

The IDEALS computer program described above includes many edit checks providing some warnings as the data are being keyed and provides an edit/error report after the data have been keyed. Examples of these edit checks are listed below:

(1) *Summations*--reported totals are compared with the sums of the constituent data items. If they are not equal, an error message is generated.

(2) *Relational edit checks*--the program compares data entries from one section of the questionnaire with date entries from another section of the questionnaire for consistency. For example, if books and bound serials were added during the fiscal year the program would expect some expenditure to be reported for books and bound serials. If one is reported without the other an error message is generated. Another example is the number of volumes of print materials added during the fiscal year cannot exceed the total number of volumes held at the end of the fiscal year.

(3) *Range checks*--For example, if the average salary of librarians is less than $20,000 or greater than 100,000, an error message is generated. If any of the collections data, except for volumes held at the end of the year is greater than 1,000,000, an error message is generated. If the reported hours of service is less than 10 hours per week or greater than 168 hours per week, an error message is generated.

When probable errors were identified by the IDEALS edit checks, state or Census Bureau personnel contacted the institution to resolve the problem. After the data were received by NCES from every state, the data files were merged and general edits and imputations were performed. Some examples follow.

- If a total was blank or zero, but there were one or more positive subtotals the total was changed to equal the sum of the subtotals.

- If prior year (1992) data were available, the 1992 responses were used for imputation.

- If prior year data were unavailable, for purposes of imputation, the higher education file was divided into 16 imputation classes. The classes were based upon the highest level of degree (Doctor's, Master's, Bachelor's, and Associate), and control and size of institution. The four control/size imputation categories were: public, less than median number of degrees; public, equal to or greater than the median; private, less than the median; private, equal to or greater than the median.

- To calculate the imputed value for a subtotal, when the total was reported, the average estimate was calculated across the set of respondents in each class including ones for which the total was obtained by adding the subtotals, but excluding those for which the sum of the subtotals did not originally equal the total. The average subtotal value was divided by the average total value within each imputation class to obtain an average proportion. The average proportion was multiplied by the reported total to obtain the imputed subtotal value.

- If for total staff (Part B, line 6) and total operating expenditures (Part C, line 19), the total and all subtotals were blank or zero, they were imputed by using the average by imputation class. The imputed total was then allocated to subtotals as described above.

- Values were imputed for all data items except contributed services staff (Part B, line 4) and employee fringe benefits (Part C, line 23). These categories were applicable to only a few institutions.

Unit and Item Nonresponse

Of the 3,303 college and university libraries, 209 or 6.3 percent were complete nonrespondents. Tables A-1 and A-2 present further information on response rates. The first three rows of table A present the number of academic libraries, and the number and percent of nonrespondents and respondents at the national level by level and control of institution. In addition, the remaining rows show the number and percent of libraries responding for each item at the national level. Table B presents the distribution of the set of complete nonrespondents by libraries by state and by level and control of institution. Table A-3 gives the number of academic libraries by state, level, and control of institution. The data user should be especially cautious in using data at a level of detail where the nonresponse rate was 30 percent or greater.

Classifications Used in the report

Various tables in the body of this report present the data by control (public, private); size of FTE enrollment (less than 1,500; 1,500 to 4,999; 5,000 or more); and the 1994 Carnegie classification. For table presentation, "level I" and "level II" of the Carnegie Classifications were combined. The Carnegie Classification categories used are as follows: Research I and II; Doctoral I and II; Master's I and II; Baccalaureate I and II; Associate of Arts; and Specialized. In addition there were 213 institutions that did not have a Carnegie Classification in 1994 and these were put into a not classified category (The Carnegie Foundation for the Advancement of Teaching, *A Classification of Institutions of Higher Education, 1994 Edition,* Princeton, N. J.). Appendix B detailed tables also present data by level of highest offering (doctor's, master's, bachelor's, and less than 4-year).

Table A-1.-- Number and percent of responding academic libraries by item and by level and control of institution: 1994

	Total higher education institutions	Pct of total responding	4-year institutions								Less than 4-year		Public		Private	
			Total 4-year institutions		Doctor's highest level of degree		Master's highest level of degree		Bachelor's highest level of degree		Total responding	Pct of total responding	Total responding	Pct of total responding	Total responding	Pct of total responding
			Total responding	Pct of total responding	Total responding	Pct of total responding	Total responding	Pct of total responding	Total responding	Pct of total responding						
All institutions	3,303	100.0%	2,032	100.0%	514	100.0%	855	100.0%	660	100.0%	1,271	100.0%	1,548	100.0%	1,755	100.0%
Non-responding libraries	209	6.3	134	6.6	40	7.8	59	6.9	32	4.8	75	5.9	53	3.4	156	8.9
Responding libraries	3,094	93.7	1,898	93.4	474	92.2	796	93.1	628	95.2	1,196	94.1	1,495	96.6	1,599	91.1
Part B-Library staff																
Librarians/professional staff	3,024	91.6	1,863	91.7	463	90.1	782	91.5	618	93.6	1,161	91.3	1,474	95.2	1,550	88.3
All other paid staff	2,974	90.0	1,841	90.6	462	89.9	770	90.1	609	92.3	1,133	89.1	1,466	94.7	1,508	85.9
Contributed services staff	2,711	82.1	1,687	83.0	424	82.5	710	83.0	553	83.8	1,024	80.6	1,330	85.9	1,381	78.7
Student assistants/all funding	2,975	90.1	1,838	90.5	457	88.9	777	90.9	604	91.5	1,137	89.5	1,446	93.4	1,529	87.1
Total FTE staff	2,926	88.6	1,790	88.1	451	87.7	742	86.8	597	90.5	1,136	89.4	1,413	91.3	1,513	86.2
Part C-Library operating expenditures																
Librarians/professional staff	2,954	89.4	1,815	89.3	462	89.9	758	88.7	595	90.2	1,139	89.6	1,451	93.7	1,503	85.6
All other paid staff	2,807	85.0	1,722	84.7	448	87.2	728	85.1	546	82.7	1,085	85.4	1,429	92.3	1,378	78.5
Student assistants	2,788	84.4	1,755	86.4	451	87.7	743	86.9	561	85.0	1,033	81.3	1,356	87.6	1,432	81.6
Books and other print materials (info resources)	3,047	92.2	1,869	92.0	468	91.1	786	91.9	615	93.2	1,178	92.7	1,485	95.9	1,562	89.0
Current serials	3,009	91.1	1,852	91.1	464	90.3	780	91.2	608	92.1	1,157	91.0	1,476	95.3	1,533	87.4
Microforms	2,699	81.7	1,646	81.0	394	76.7	709	82.9	543	82.3	1,053	82.8	1,339	86.5	1,360	77.5
Audiovisual materials	2,700	81.7	1,616	79.5	390	75.9	674	78.8	552	83.6	1,084	85.3	1,323	85.5	1,377	78.5
Computer files/search services	2,745	83.1	1,676	82.5	419	81.5	697	81.5	560	84.8	1,069	84.1	1,339	86.5	1,406	80.1
Document delivery/interlibrary loan	2,548	77.1	1,601	78.8	405	78.8	671	78.5	525	79.5	947	74.5	1,239	80.0	1,309	74.6
Other information resources	2,415	73.1	1,490	73.3	385	74.9	604	70.6	501	75.9	925	72.8	1,173	75.8	1,242	70.8
Preservation	2,712	82.1	1,716	84.4	445	86.6	723	84.6	548	83.0	996	78.4	1,327	85.7	1,385	78.9
Furniture and equipment	2,790	84.5	1,700	83.7	426	82.9	711	83.2	563	85.3	1,090	85.8	1,375	88.8	1,415	80.6
Computer hardware and software	2,807	85.0	1,718	84.5	441	85.8	717	83.9	560	84.8	1,089	85.7	1,383	89.3	1,424	81.1
Bibliographic utilities, networks, consortia	2,776	84.0	1,731	85.2	442	86.0	731	85.5	558	84.5	1,045	82.2	1,347	87.0	1,429	81.4
All other operating expenditures	2,862	86.6	1,766	86.9	440	85.6	741	86.7	585	88.6	1,096	86.2	1,387	89.6	1,475	84.0
Total operating expenditures	2,801	84.8	1,713	84.3	429	83.5	726	84.9	558	84.5	1,088	85.6	1,375	88.8	1,426	81.3
Part D-Library collections																
Books/serials cataloged vols. added	2,957	89.5	1,835	90.3	459	89.3	775	90.6	601	91.1	1,122	88.3	1,445	93.3	1,512	86.2
Books/serials cataloged vols. eofy	3,021	91.5	1,866	91.8	464	90.3	783	91.6	619	93.8	1,155	90.9	1,462	94.4	1,559	88.8
Books/serials cataloged titles added	2,523	76.4	1,509	74.3	344	66.9	659	77.1	506	76.7	1,014	79.8	1,230	79.5	1,293	73.7
Books/serials cataloged titles eofy	2,530	76.6	1,498	73.7	338	65.8	658	77.0	502	76.1	1,032	81.2	1,234	79.7	1,296	73.8
Govt. documents no. of units added	2,250	68.1	1,417	69.7	352	68.5	602	70.4	463	70.2	833	65.5	1,073	69.3	1,177	67.1
Govt. documents no. of units eofy	2,322	70.3	1,465	72.1	372	72.4	618	72.3	475	72.0	857	67.4	1,116	72.1	1,206	68.7
Govt. documents no. of titles added	1,899	57.5	1,088	53.5	228	44.4	461	53.9	399	60.5	811	63.8	870	56.2	1,029	58.6
Govt. documents no. of titles eofy	1,949	59.0	1,114	54.8	235	45.7	472	55.2	407	61.7	835	65.7	896	57.9	1,053	60.0
Current serials paid/unpaid added	2,728	82.6	1,646	81.0	392	76.3	693	81.1	561	85.0	1,082	85.1	1,328	85.8	1,400	79.8
Current serials paid/unpaid eofy	2,992	90.6	1,830	90.1	452	87.9	772	90.3	606	91.8	1,162	91.4	1,454	93.9	1,538	87.6
Current serials no. of titles added	2,301	69.7	1,344	66.1	300	58.4	575	67.3	469	71.1	957	75.3	1,114	72.0	1,187	67.6
Current serials no. of titles eofy	2,500	75.7	1,479	72.8	334	65.0	636	74.4	509	77.1	1,021	80.3	1,210	78.2	1,290	73.5
Microforms no. of units added	2,669	80.8	1,676	82.5	422	82.1	718	84.0	536	81.2	993	78.1	1,330	85.9	1,339	76.3
Microforms no. of units eofy	2,813	85.2	1,759	86.6	445	86.6	743	86.9	571	86.5	1,054	82.9	1,395	90.1	1,418	80.8
Microforms no. of titles added	1,863	56.4	1,080	53.1	242	47.1	460	53.8	378	57.3	783	61.6	893	57.7	970	55.3

NOTE: EOFY = held at End Of Fiscal Year
SOURCE: 1994 IPEDS Academic Library Survey

Table A-1.-- Number and percent of responding academic libraries by item and by level and control of institution: 1994 continued

	Total higher education institutions	Pct of total responding	4-year institutions								Less than 4-year		Public		Private	
			Total 4-year institutions		Doctor's highest level of degree		Master's highest level of degree		Bachelor's highest level of degree							
			Total responding	Pct of total responding	Total responding	Pct of total responding	Total responding	Pct of total responding	Total responding	Pct of total responding	Total responding	Pct of total responding	Total responding	Pct of total responding	Total responding	Pct of total responding
Part D-Library collections																
Microforms no. of titles eofy	2,265	68.6%	1,259	62.0%	269	52.3%	519	60.7%	471	71.4%	1,006	79.2%	1,100	71.1%	1,165	66.4%
Manuscripts/archives (feet) added	2,254	68.2	1,413	69.5	377	73.3	580	67.8	456	69.1	841	66.2	1,093	70.6	1,161	66.2
Manuscripts/archives (feet) eofy	2,438	73.8	1,538	75.7	416	80.9	624	73.0	498	75.5	900	70.8	1,165	75.3	1,273	72.5
Cartographic materials (units) added	2,349	71.1	1,465	72.1	379	73.7	605	70.8	481	72.9	884	69.6	1,163	75.1	1,186	67.6
Cartographic materials (units) eofy	2,519	76.3	1,558	76.7	402	78.2	646	75.6	510	77.3	961	75.6	1,253	80.9	1,266	72.1
Graphic materials (no. units) added	2,330	70.5	1,418	69.8	357	69.5	601	70.3	460	69.7	912	71.8	1,135	73.3	1,195	68.1
Graphic materials (no. units) eofy	2,503	75.8	1,528	75.2	391	76.1	642	75.1	495	75.0	975	76.7	1,230	79.5	1,273	72.5
Sound recordings (no. units) added	2,539	76.9	1,573	77.4	400	77.8	669	78.2	504	76.4	966	76.0	1,221	78.9	1,318	75.1
Sound recordings (no. units) eofy	2,667	80.7	1,644	80.9	410	79.8	689	80.6	545	82.6	1,023	80.5	1,285	83.0	1,382	78.7
Sound recordings (no. titles) added	2,213	67.0	1,299	63.9	296	57.6	549	64.2	454	68.8	914	71.9	1,060	68.5	1,153	65.7
Sound recordings (no. titles) eofy	2,311	70.0	1,341	66.0	298	58.0	561	65.6	482	73.0	970	76.3	1,103	71.3	1,208	68.8
Film/video materials units added	2,645	80.1	1,621	79.8	403	78.4	677	79.2	541	82.0	1,024	80.6	1,281	82.8	1,364	77.7
Film/video materials units eofy	2,767	83.8	1,690	83.2	415	80.7	703	82.2	572	86.7	1,077	84.7	1,334	86.2	1,433	81.7
Film/video materials titles added	2,324	70.4	1,359	66.9	314	61.1	569	66.5	476	72.1	965	75.9	1,116	72.1	1,208	68.8
Film/video materials titles eofy	2,394	72.5	1,400	68.9	311	60.5	590	69.0	499	75.6	994	78.2	1,141	73.7	1,253	71.4
Computer files no. of units added	2,473	74.9	1,490	73.3	373	72.6	625	73.1	492	74.5	983	77.3	1,181	76.3	1,292	73.6
Computer files no. of units eofy	2,608	79.0	1,577	77.6	398	77.4	658	77.0	521	78.9	1,031	81.1	1,252	80.9	1,356	77.3
Computer files no. of titles added	2,340	70.8	1,366	67.2	312	60.7	579	67.7	475	72.0	974	76.6	1,125	72.7	1,215	69.2
Computer files no. of titles eofy	2,435	73.7	1,421	69.9	323	62.8	600	70.2	498	75.5	1,014	79.8	1,170	75.6	1,265	72.1
Other library materials units added	2,146	65.0	1,333	65.6	318	61.9	578	67.6	437	66.2	813	64.0	1,036	66.9	1,110	63.2
Other library materials units eofy	2,298	69.6	1,421	69.9	336	65.4	617	72.2	468	70.9	877	69.0	1,112	71.8	1,186	67.6
Part E-Library services, fiscal year																
Circulation trans. general	3,003	90.9	1,849	91.0	464	90.3	780	91.2	605	91.7	1,154	90.8	1,473	95.2	1,530	87.2
Circulation trans. reserve	2,710	82.0	1,686	83.0	420	81.7	715	83.6	551	83.5	1,024	80.6	1,331	86.0	1,379	78.6
Inter-loans provided to	2,984	90.3	1,848	90.9	465	90.5	779	91.1	604	91.5	1,136	89.4	1,473	95.2	1,511	86.1
Inter-loans received from	2,997	90.7	1,855	91.3	465	90.5	783	91.6	607	92.0	1,142	89.9	1,478	95.5	1,519	86.6
Info serv. no. of presentations	2,883	87.3	1,762	86.7	431	83.9	739	86.4	592	89.7	1,121	88.2	1,418	91.6	1,465	83.5
Info serv. no. of persons	2,822	85.4	1,721	84.7	426	82.9	728	85.1	567	85.9	1,101	86.6	1,419	91.7	1,403	79.9
Part F-Library service per typical week																
Public service hours	3,003	90.9	1,844	90.7	458	89.1	772	90.3	614	93.0	1,159	91.2	1,476	95.3	1,527	87.0
Gate count	2,257	68.3	1,313	64.6	316	61.5	558	65.3	439	66.5	944	74.3	1,127	72.8	1,130	64.4
Reference transactions	2,379	72.0	1,429	70.3	345	67.1	627	73.3	457	69.2	950	74.7	1,180	76.2	1,199	68.3

NOTE: EOFY = held at End Of Fiscal Year
SOURCE: 1994 IPEDS Academic Library Survey

Table A-2.-- Number and percent of non-responding academic libraries by state, level and control of institution: 1994

	Total higher education institutions	Pct	4-year institutions								Less than 4-year		Public		Private	
			Total 4-year institutions		Doctor's highest level of degree		Master's highest level of degree		Bachelor's highest level of degree		Total	Pct	Total	Pct	Total	Pct
			Total	Pct	Total	Pct	Total	Pct	Total	Pct						
Libraries with all items imputed	209	6.3%	134	6.6%	40	7.8%	59	6.9%	32	4.8%	75	5.9%	53	3.4%	156	8.9%
Alabama	5	7.7	4	12.1	1	11.1	1	7.1	2	20.0	1	3.1	3	6.8	2	9.5
Alaska	1	14.3	1	20.0	0	0	1	50.0	0	0	0	0	1	25.0	0	0
Arizona	6	15.8	2	11.8	0	0	2	28.6	0	0	4	19.0	3	13.6	3	18.8
Arkansas	1	2.9	0	0	0	0	0	0	0	0	1	7.1	0	0	1	7.7
California	48	16.2	30	18.8	11	24.4	16	19.5	2	6.2	18	13.1	10	7.2	38	23.9
Colorado	4	7.7	2	6.5	1	10.0	1	10.0	0	0	2	9.5	1	3.6	3	12.5
Connecticut	1	2.4	1	4.0	0	0	0	0	1	25.0	0	0	0	0	1	4.5
Delaware	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
District of Columbia	4	25.0	4	25.0	2	28.6	2	25.0	0	0	0	0	0	0	4	28.6
Florida	8	7.8	5	7.9	1	6.7	1	5.0	3	10.7	3	7.7	0	0	8	12.5
Georgia	10	10.4	2	4.2	2	16.7	0	0	0	0	8	16.7	6	10.5	4	10.3
Hawaii	2	13.3	2	22.2	1	33.3	0	0	1	33.3	0	0	1	11.1	1	16.7
Idaho	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Illinois	9	5.8	8	8.3	4	12.9	0	0	4	10.8	1	1.7	0	0	9	9.5
Indiana	3	4.3	3	5.9	0	0	1	4.0	2	11.8	0	0	0	0	3	7.0
Iowa	3	5.5	1	2.6	0	0	0	0	1	5.0	2	11.8	2	11.8	1	2.6
Kansas	1	2.0	1	3.8	0	0	0	0	1	10.0	0	0	0	0	1	5.0
Kentucky	3	6.3	0	0	0	0	0	0	0	0	3	25.0	1	11.1	2	5.1
Louisiana	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Maine	2	6.5	1	5.0	1	50.0	0	0	0	0	1	9.1	0	0	2	11.8
Maryland	2	3.6	2	5.9	1	11.1	1	5.0	0	0	0	0	0	0	2	9.1
Massachusetts	4	3.5	4	4.7	2	7.7	2	5.9	0	0	0	0	0	0	4	4.8
Michigan	8	7.7	7	10.4	0	0	4	16.7	3	9.4	1	2.7	1	2.2	7	11.9
Minnesota	6	7.1	2	4.7	1	14.3	0	0	1	5.0	4	9.5	3	6.7	3	7.5
Mississippi	4	9.8	2	9.5	0	0	2	28.6	0	0	2	10.0	2	7.7	2	13.3
Missouri	10	10.6	8	11.9	4	25.0	1	4.8	3	10.0	2	7.4	2	6.5	8	12.7
Montana	1	4.0	1	10.0	0	0	1	25.0	0	0	0	0	0	0	1	16.7
Nebraska	1	3.0	0	0	0	0	0	0	0	0	1	9.1	0	0	1	5.9
Nevada	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
New Hampshire	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
New Jersey	1	1.9	1	3.2	0	0	1	6.2	0	0	0	0	1	3.0	0	0
New Mexico	1	3.4	1	8.3	0	0	1	14.3	0	0	0	0	1	4.5	0	0
New York	13	5.3	6	3.6	2	4.3	3	3.8	1	2.4	7	8.8	1	1.2	12	7.5
North Carolina	1	.8	1	1.8	0	0	0	0	1	4.0	0	0	1	1.3	0	0
North Dakota	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ohio	6	4.5	6	7.0	1	5.0	4	11.1	1	3.3	0	0	3	5.5	3	3.8
Oklahoma	5	10.9	3	11.5	2	28.6	1	6.7	0	0	2	10.0	0	0	5	29.4
Oregon	1	2.3	0	0	0	0	0	0	0	0	1	7.1	0	0	1	4.3
Pennsylvania	10	5.3	7	5.0	1	3.7	3	4.8	3	6.0	3	6.0	3	4.9	7	5.4
Rhode Island	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
South Carolina	1	1.7	1	2.9	0	0	0	0	0	0	0	0	1	2.9	0	0
South Dakota	4	22.2	4	23.5	0	0	4	44.4	0	0	0	0	2	22.2	2	22.2
Tennessee	3	4.1	2	4.0	0	0	1	4.8	1	7.1	1	4.3	0	0	3	6.1
Texas	6	3.5	4	4.1	0	0	3	8.6	0	0	2	2.7	3	2.9	3	4.3
Utah	1	7.1	0	0	0	0	0	0	0	0	1	16.7	0	0	1	20.0
Vermont	2	9.1	2	10.5	0	0	2	16.7	0	0	0	0	0	0	2	12.5
Virginia	4	4.9	1	2.2	1	7.7	0	0	0	0	3	8.6	0	0	4	9.5
Washington	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
West Virginia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wisconsin	3	4.9	2	4.9	1	20.0	0	0	1	11.1	1	5.0	1	3.3	2	6.5
Wyoming	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

SOURCE: 1994 IPEDS Academic Library Survey

Table A-3.-- Number of academic libraries by state, level, and control of institution: 1994

	Total higher education institutions	4-year institutions				Less than 4-year	Public	Private
		Total 4-year institutions	Doctor's highest level of degree	Master's highest level of degree	Bachelor's highest level of degree			
Libraries	3,303	2,032	514	855	660	1,271	1,548	1,755
Alabama	65	33	9	14	10	32	44	21
Alaska	7	5	1	2	2	2	4	3
Arizona	38	17	4	7	6	21	22	16
Arkansas	34	20	4	8	8	14	21	13
California	297	160	45	82	32	137	138	159
Colorado	52	31	10	10	11	21	28	24
Connecticut	41	25	6	13	4	16	19	22
Delaware	9	6	2	3	1	3	5	4
District of Columbia	16	16	7	8	1	0	2	14
Florida	102	63	15	20	28	39	38	64
Georgia	96	48	12	20	16	48	57	39
Hawaii	15	9	3	3	3	6	9	6
Idaho	11	7	2	3	2	4	6	5
Illinois	155	96	31	28	37	59	60	95
Indiana	70	51	9	25	17	19	27	43
Iowa	55	38	6	12	20	17	17	38
Kansas	49	26	5	11	10	23	29	20
Kentucky	48	36	7	12	17	12	9	39
Louisiana	31	24	10	11	3	7	19	12
Maine	31	20	2	7	11	11	14	17
Maryland	56	34	9	20	5	22	34	22
Massachusetts	115	85	26	34	25	30	31	84
Michigan	104	67	11	24	32	37	45	59
Minnesota	85	43	7	16	20	42	45	40
Mississippi	41	21	7	7	7	20	26	15
Missouri	94	67	16	21	30	27	31	63
Montana	25	10	2	4	4	15	19	6
Nebraska	33	22	4	9	9	11	16	17
Nevada	8	4	2	0	2	4	6	2
New Hampshire	28	17	3	7	7	11	11	17
New Jersey	54	31	10	16	5	23	33	21
New Mexico	29	12	3	7	2	17	22	7
New York	246	166	47	78	41	80	86	160
North Carolina	122	56	11	20	25	66	75	47
North Dakota	20	10	2	2	6	10	15	5
Ohio	133	86	20	36	30	47	55	78
Oklahoma	46	26	7	15	4	20	29	17
Oregon	44	30	8	13	9	14	21	23
Pennsylvania	190	140	27	63	50	50	61	129
Rhode Island	12	10	4	5	1	2	3	9
South Carolina	60	35	7	13	14	25	34	26
South Dakota	18	17	4	9	4	1	9	9
Tennessee	73	50	15	21	14	23	24	49
Texas	172	97	39	35	22	75	103	69
Utah	14	8	3	3	2	6	9	5
Vermont	22	19	2	12	5	3	6	16
Virginia	81	46	13	16	17	35	39	42
Washington	59	27	5	15	7	32	38	21
West Virginia	27	23	2	8	13	4	16	11
Wisconsin	61	41	5	27	9	20	30	31
Wyoming	9	1	1	0	0	8	8	1

SOURCE: 1994 IPEDS Academic Library Survey

Table A-4.—Full-time-equivalent(FTE) enrollment and Education and General expenditures (E&G) in institutions of higher education (IHE's) in the 50 states and DC having academic libraries by control and Carnegie Classification: percent distribution and percent change 1990-94

Institutional characteristics	Full-time-equivalent enrollment			Education and General Expenditures (E&G)		
	Number	Percent distribution	Percent change 1990-94	Amount in millions	Percent distribution	Percent change 1990-94 in constant dollars
Total	9,978,955	100.0%	6.6%	$138,800	100.0%	13.6%
Public	7,588,867	76.0	6.2	88,850	64.0	11.5
Private	2,390,088	24.0	8.0	49,960	36.0	17.7
Research I and II	2,268,209	22.7	0.6	56,530	40.7	9.8
Public	1,810,795	18.1	0.2	36,850	26.5	7.2
Private	457,414	4.6	2.4	19,670	14.2	14.9
Doctoral I and II	979,728	9.8	2.2	13,420	9.7	12.5
Public	728,837	7.3	2.2	8,423	6.1	11.2
Private	250,891	2.5	2.0	4,993	3.6	15.2
Master's I and II	2,352,781	23.6	6.0	24,200	17.4	13.1
Public	1,756,036	17.6	5.3	16,020	11.5	10.2
Private	596,745	6.0	7.9	8,187	5.9	20.1
Baccalaureate I and II	808,188	8.1	9.9	11,460	8.3	18.9
Public	183,121	1.8	10.0	1,575	1.1	15.7
Private	625,066	6.3	9.9	9,887	7.1	19.5
Associate of Arts	3,072,302	30.8	15.2	19,900	14.3	19.8
Public	2,917,085	29.2	11.5	18,420	13.3	19.3
Private	155,217	1.6	11.0	1,472	1.1	30.6
Specialized	376,808	3.8	16.7	11,880	8.6	22.2
Public	110,304	1.1	11.8	6,341	4.6	21.0
Private	266,504	2.7	18.9	5,544	4.0	24.0
Not Classified	120,940	1.2	2.0	1,421	1.0	-4.8%

NOTE: FTE enrollment and E&G expenditures are only for those institutions (3,303) of higher education having academic libraries. Calculations of percent change include only those institutions reporting to library survey in both 1994 and 1990. FTE enrollment is calculated by taking one-third of part-time enrollment and adding the amount to full-time enrollment. Constant dollars calculated based on consumer price index as published in 1996 US Statistical Abstract, table 745. Details may not sum to totals due to rounding.

SOURCE: United States Department of Education, National Center for Education Statistics (NCES), Integrated Postsecondary Data Systems (IPEDS); *1994 Academic Library Survey, 1990 Academic Library Survey, 1993-94 Fall Enrollment Survey, 1993-94 Finance Survey*

Appendix B: Detailed Tables

Table B-1.-- Total circulation and interlibrary loan transactions in academic libraries by control, level, size, and Carnegie Classification of institution: 1994

Institutional characteristic	Total number of libraries	Circulation		Interlibrary loans	
		General collection	Reserve collection	Loans provided to other libraries	Loans received from other libraries
All higher education institutions [1]	3,303	183,123,172	48,380,305	8,761,065	6,344,154
Control					
Public	1,548	127,306,796	30,926,485	5,803,093	3,931,950
Private	1,755	55,816,376	17,453,820	2,957,972	2,412,204
Level [2]					
Total 4-year and above	2,032	156,053,685	40,633,627	8,185,248	5,700,084
Doctor's	514	106,104,180	26,255,633	5,704,908	3,395,760
Master's	855	37,318,173	10,352,413	1,877,351	1,667,389
Bachelor's	660	12,459,649	3,978,749	593,503	630,671
Less than 4-year	1,271	27,069,487	7,746,677	575,817	644,070
Size (FTE enrollment)					
Less than 1,500	1,754	23,929,857	7,196,739	1,208,148	1,156,986
1,500 to 4,999	984	37,841,618	11,077,578	1,878,825	1,703,113
5,000 or more	565	121,351,698	30,105,988	5,674,093	3,484,055
Carnegie Classification (1994) [2]					
Research I and II	125	71,256,661	16,095,411	3,349,195	1,753,439
Doctoral I and II	110	19,193,662	5,425,177	1,176,469	876,187
Master's I and II	518	35,972,284	9,548,147	1,849,229	1,531,512
Baccalaureate I and II	606	16,758,631	5,316,295	904,479	937,303
Associate of Arts	1,175	26,239,848	7,727,923	555,925	607,393
Specialized	556	10,918,603	3,430,391	816,236	490,559
Not classified	213	2,783,482	836,959	109,532	147,761

[1] Institutions with accreditation at the higher education level recognized by the Secretary of Education, 1994

[2] While 'level' and 'Carnegie Classification' are similar, there is not complete overlap in the two classifications. 'Level' refers to the highest level of any degree offered by the institution. The 'Carnegie Classification' is based on criteria such as institution mission and research funding in addition to highest level of degree awarded. The Carnegie Classification was developed by The Carnegie Foundation for the Advancement of Teaching and published in *A Classification of Institutions of Higher Education, 1994 Edition.*

NOTE: This table is similar to Table 9B in the 1992 Academic Libraries E.D.-TABS report.

SOURCE: 1994 IPEDS Academic Library Survey

Table B-2.-- Public service hours per typical week and number of libraries by category of public service hours per typical week in academic libraries by control, level, size, and Carnegie Classification of institution: 1994

Institutional characteristic	Total number of libraries	Public service hours per typical week							
		Total	Less than 20	20 to 39	40 to 59	60 to 79	80 to 99	100 to 119	120 or more
All higher education institutions [1]	3,303	252,112	23	63	439	1,430	962	311	75
Control									
Public	1,548	117,692	4	3	160	856	378	105	42
Private	1,755	134,420	19	60	279	574	584	206	33
Level [2]									
Total 4-year and above	2,032	170,787	7	21	148	596	908	301	51
Doctor's	514	47,402	2	4	25	83	226	144	30
Master's	855	71,917	3	8	44	231	466	90	13
Bachelor's	660	51,228	2	9	79	280	215	67	8
Less than 4-year	1,271	81,325	16	42	291	834	54	10	24
Size (FTE enrollment)									
Less than 1,500	1,754	122,427	21	62	365	790	408	88	20
1,500 to 4,999	984	78,556	1	0	62	468	329	107	17
5,000 or more	565	51,129	1	1	12	172	225	116	38
Carnegie Classification (1994) [2]									
Research I and II	125	13,133	1	1	2	2	35	68	16
Doctoral I and II	110	10,902	0	0	2	6	59	34	9
Master's I and II	518	45,855	0	0	7	102	347	52	10
Baccalaureate I and II	606	51,455	2	3	14	191	301	87	8
Associate of Arts	1,175	76,631	10	31	231	813	59	10	21
Specialized	556	40,974	4	15	108	222	145	54	8
Not classified	213	13,161	6	13	75	94	16	6	3

[1] Institutions with accreditation at the higher education level recognized by the Secretary of Education, 1994.
[2] While 'level' and 'Carnegie Classification' are similar, there is not complete overlap in the two classifications. 'Level' refers to the highest level of any degree offered by the institution. The 'Carnegie Classification' is based on criteria such as institution mission and research funding in addition to highest level of degree awarded. The Carnegie Classification was developed by The Carnegie Foundation for the Advancement of Teaching and published in *A Classification of Institutions of Higher Education, 1994 Edition*.
NOTE: This table is similar to Table 10B in the 1992 Academic Libraries E.D.-TABS report.
SOURCE: 1994 IPEDS Academic Library Survey.

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Table B-3.-- Number served and number of reference transactions per typical week, and total information service to groups, in academic libraries by control, level, size, and Carnegie Classification of institution: 1994

Institutional characteristic	Total number of libraries	Gate count per typical week	Reference transactions, including computer searches per typical week	Information service to groups, fiscal year 1994	
				Total number of presentations	Total number served
All higher education institutions [1]	3,303	17,830,269	2,147,109	487,279	6,081,659
Control					
Public	1,548	11,725,523	1,476,729	226,972	4,260,345
Private	1,755	6,104,746	670,379	260,307	1,821,314
Level [2]					
Total 4-year and above	2,032	13,897,613	1,555,351	248,815	3,999,457
Doctor's	514	8,613,309	955,628	130,688	1,911,121
Master's	855	3,875,954	443,433	86,469	1,537,100
Bachelor's	660	1,395,407	154,631	31,331	545,105
Less than 4-year	1,271	3,932,657	591,757	238,464	2,082,202
Size (FTE enrollment)					
Less than 1,500	1,754	3,149,230	417,736	206,780	1,131,896
1,500 to 4,999	984	4,387,241	507,057	103,481	1,909,572
5,000 or more	565	10,293,798	1,222,315	177,019	3,040,191
Carnegie Classification (1994) [2]					
Research I and II	125	4,956,865	526,706	71,005	1,005,937
Doctoral I and II	110	1,784,399	201,765	29,530	479,186
Master's I and II	518	3,598,437	423,912	77,958	1,401,545
Baccalaureate I and II	606	1,787,106	170,234	36,029	638,971
Associate of Arts	1,175	3,874,273	587,263	232,184	2,054,845
Specialized	556	1,537,584	180,299	26,135	355,655
Not classified	213	291,604	56,929	14,438	145,519

[1] Institutions with accreditation at the higher education level recognized by the Secretary of Education, 1994.
[2] While 'level' and 'Carnegie Classification' are similar, there is not complete overlap in the two classifications. 'Level' refers to the highest level of any degree offered by the institution. The 'Carnegie Classification' is based on criteria such as institution mission and research funding in addition to highest level of degree awarded. The Carnegie Classification was developed by The Carnegie Foundation for the Advancement of Teaching and published in *A Classification of Institutions of Higher Education, 1994 Edition*.
NOTE: This table was not included in the 1992 Academic Libraries E.D.-TABS report but is similar to Table 11B in the 1990 Academic Libraries E.D.-TABS report.
SOURCE: 1994 IPEDS Academic Library Survey

Table B-4.-- Number of volumes of books, bound serials, and bound government documents held at the end of the year, and number of libraries by number of volumes by control, level, size, and Carnegie Classification of institution: 1994

Institutional characteristic	Total number of libraries	Volumes held at end of year	Number of libraries in volume category									
			Less than 5,000	5,000 to 9,999	10,000 to 19,999	20,000 to 29,999	30,000 to 49,999	50,000 to 99,999	100,000 to 249,999	250,000 to 499,999	500,000 to 999,999	1,000,000 or more
All higher education institutions [1]	3,303	776,447,422	237	147	219	229	495	663	744	269	143	157
Control												
Public	1,548	449,762,826	30	44	79	145	332	330	238	145	99	106
Private	1,755	326,684,596	207	103	140	84	163	333	506	124	44	51
Level [2]												
Total 4-year and above	2,032	724,534,843	65	53	79	71	160	367	673	264	143	157
Doctor's	514	495,291,020	8	6	8	6	8	38	127	75	88	150
Master's	855	167,175,683	17	18	18	17	48	157	372	152	49	7
Bachelor's	660	61,465,053	40	29	53	48	102	172	174	37	5	0
Less than 4-year	1,271	51,912,579	172	94	140	158	335	296	71	5	0	0
Size (FTE enrollment)												
Less than 1,500	1,754	114,526,875	233	126	188	176	288	341	363	33	4	2
1,500 to 4,999	984	147,965,325	3	20	31	52	193	228	292	129	29	7
5,000 or more	565	513,955,222	1	1	0	1	14	94	89	107	110	148
Carnegie Classification (1994) [2]												
Research I and II	125	336,562,137	0	0	0	0	0	0	1	1	13	110
Doctoral I and II	110	87,076,878	0	0	0	0	0	1	11	19	44	35
Master's I and II	518	153,340,734	1	0	3	3	5	52	216	163	67	8
Baccalaureate I and II	606	95,481,934	1	4	6	6	31	186	292	63	14	3
Associate of Arts	1,175	51,226,416	131	69	108	155	333	304	71	4	0	0
Specialized	556	44,413,683	42	44	62	54	89	111	132	18	3	1
Not classified	213	8,345,640	62	30	40	11	37	9	21	1	2	0

[1] Institutions with accreditation at the higher education level recognized by the Secretary of Education, 1994

[2] While 'level' and 'Carnegie Classification' are similar, there is not complete overlap in the two classifications. 'Level' refers to the highest level of any degree offered by the institution. The 'Carnegie Classification' is based on criteria such as institution mission and research funding in addition to highest level of degree awarded. The Carnegie Classification was developed by The Carnegie Foundation for the Advancement of Teaching and published in *A Classification of Institutions of Higher Education, 1994 Edition*.

NOTE: This table is similar to Table 5B in the 1992 Academic Libraries E.D.-TABS report.

SOURCE: 1994 IPEDS Academic Library Survey

Table B-5.-- Number of units and linear feet held at the end of the year and number of volumes, units, and linear feet added during the year by material collection category, in academic libraries by control, level, size, and Carnegie Classification of institution: 1994

Institutional characteristic	Total number of libraries	Number held at the end of the year				Number added during the year				
		Physical units of microforms	Manuscripts and archives in linear feet	Cartographic materials units	Graphic materials units	Books and bound serials volumes	Physical units of microforms	Manuscripts and archives linear feet	Cartographic materials units	Graphic materials units
All higher education institutions [1]	3,303	929,248,580	4,131,208	34,959,196	94,531,358	21,543,879	46,071,716	220,493	865,480	2,720,516
Control										
Public	1,548	641,882,862	2,462,143	26,760,574	66,080,943	12,373,248	28,198,961	112,263	670,713	1,426,699
Private	1,755	287,365,718	1,669,065	8,198,621	28,450,415	9,170,630	17,872,755	108,230	194,768	1,293,817
Level [2]										
Total 4-year and above	2,032	891,780,311	3,969,454	34,670,605	90,736,613	19,647,927	43,496,143	214,780	851,683	2,612,448
Doctor's	514	594,260,012	2,769,850	30,122,745	77,013,203	13,127,338	25,782,343	140,964	679,624	2,121,132
Master's	855	264,804,102	945,269	3,623,370	10,662,311	4,733,309	15,130,061	55,665	133,686	371,259
Bachelor's	660	31,809,422	250,776	877,274	2,976,115	1,767,584	2,532,972	18,001	37,121	114,412
Less than 4-year	1,271	37,468,269	161,754	288,591	3,794,745	1,895,951	2,575,573	5,713	13,797	108,069
Size (FTE enrollment)										
Less than 1,500	1,754	87,452,713	624,615	1,554,509	9,023,953	3,651,174	7,047,051	56,996	55,514	339,265
1,500 to 4,999	984	174,771,473	776,078	3,144,482	8,500,929	4,292,620	10,430,464	30,624	110,592	375,359
5,000 or more	565	667,024,393	2,730,515	30,260,205	77,006,476	13,600,085	28,594,201	132,873	699,375	2,005,893
Carnegie Classification (1994) [2]										
Research I and II	125	376,379,098	2,009,015	22,247,899	61,766,592	8,495,004	15,000,264	98,194	509,545	1,655,995
Doctoral I and II	110	132,037,157	435,057	5,433,440	9,932,686	2,590,766	6,319,090	22,353	112,174	272,893
Master's I and II	518	274,245,116	819,897	4,250,538	7,883,419	4,139,087	13,738,051	30,764	144,926	239,820
Baccalaureate I and II	606	60,229,846	420,803	1,633,662	3,433,864	2,572,055	4,534,724	36,956	53,090	112,948
Associate of Arts	1,175	36,658,962	153,137	276,409	3,711,982	1,847,672	2,515,772	4,964	13,325	101,166
Specialized	556	40,865,909	253,901	1,021,183	7,224,694	1,508,324	2,863,092	21,854	29,499	313,808
Not classified	213	8,832,492	39,398	96,064	578,120	390,971	1,100,723	5,409	2,920	23,886

[1] Institutions with accreditation at the higher education level recognized by the Secretary of Education, 1994.
[2] While "level" and "Carnegie Classification" are similar, there is not complete overlap in the two classifications. "Level" refers to the highest level of any degree offered by the institution. The "Carnegie Classification" is based on criteria such as institution mission and research funding in addition to highest level of degree awarded. The Carnegie Classification was developed by The Carnegie Foundation for the Advancement of Teaching and published in *A Classification of Institutions of Higher Education, 1994 Edition*.
NOTE: This table is similar to Table 68 in the 1992 Academic Libraries E.D.-TABS report.
SOURCE: 1994 IPEDS Academic Library Survey.

Table B-6.-- Number of unduplicated titles held at the end of the year in academic libraries by material collection category, and control, level, size, and Carnegie Classification of institution: 1994

Institutional characteristic	Total number of libraries	Books and bound serials	Government documents not elsewhere classified	Current serial subscriptions	Microforms	Sound recordings [3]	Films and video materials	Computer files [3]
All higher education institutions [1]	3,303	422,267,288	66,508,575	6,212,409	158,344,531	9,268,687	3,392,189	464,940
Control								
Public	1,548	247,183,246	51,070,524	3,345,465	107,299,793	4,729,134	2,270,725	319,877
Private	1,755	175,084,042	15,438,051	2,866,943	51,044,738	4,539,553	1,121,464	145,063
Level [2]								
Total 4-year and above	2,032	378,373,227	64,689,014	5,738,706	154,437,512	7,795,986	2,166,838	319,382
Doctor's	514	217,400,365	37,541,012	3,816,722	84,024,846	4,244,551	916,820	145,823
Master's	855	114,783,737	23,047,011	1,473,101	63,782,328	2,501,269	877,947	87,786
Bachelor's	660	45,783,631	3,926,583	442,945	6,430,671	1,041,611	369,838	75,703
Less than 4-year	1,271	43,894,061	1,819,561	473,703	3,907,019	1,472,700	1,225,351	145,558
Size (FTE enrollment)								
Less than 1,500	1,754	89,141,805	6,435,750	1,201,698	22,685,610	2,419,501	911,608	195,621
1,500 to 4,999	984	102,368,524	16,837,545	1,308,261	44,151,058	2,365,178	1,193,613	102,036
5,000 or more	565	230,756,959	43,235,280	3,702,450	91,507,863	4,484,007	1,286,968	167,282
Carnegie Classification (1994) [2]								
Research I and II	125	122,858,218	15,730,298	2,110,909	37,690,541	2,315,416	415,945	32,066
Doctoral I and II	110	48,339,458	12,664,542	1,026,778	19,650,848	1,024,567	206,346	53,651
Master's I and II	518	102,307,722	26,382,322	1,121,701	74,059,956	1,906,543	688,778	82,863
Baccalaureate I and II	606	66,378,921	5,974,472	620,462	12,808,060	1,480,674	501,686	57,057
Associate of Arts	1,175	43,287,854	1,798,443	451,568	3,797,216	1,426,530	1,191,718	140,115
Specialized	556	33,307,369	3,575,289	781,234	9,251,880	928,076	304,229	74,504
Not classified	213	5,787,746	383,209	99,758	1,086,031	186,880	83,487	24,684

[1] Institutions with accreditation at the higher education level recognized by the Secretary of Education, 1994.
[2] While 'level' and 'Carnegie Classification' are similar, there is not complete overlap in the two classifications. 'Level' refers to the highest level of any degree offered by the institution. The 'Carnegie Classification' is based on criteria such as institution mission and research funding in addition to highest level of degree awarded. The Carnegie Classification was developed by The Carnegie Foundation for the Advancement of Teaching and published in *A Classification of Institutions of Higher Education, 1994 Edition*.
[3] 'Sound recordings' was previously labeled 'Audio materials,' and 'Computer files' was previously labeled 'Machine readable materials.'
NOTE: This table is similar to Table 7B in the 1992 Academic Libraries E.D.-TABS report.
SOURCE: 1994 IPEDS Academic Library Survey

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Table B-7.-- Number of unduplicated titles added during the year by material collection category, and by control, level, size, and Carnegie Classification of institution: 1994

Institutional characteristic	Total number of libraries	Books and bound serials	Government documents not elsewhere classified	Current serial subscriptions	Microforms	Sound recordings [3]	Films and video materials	Computer files [3]
All higher education institutions [1]	3,303	12,830,647	3,173,709	226,767	9,799,683	342,861	364,264	83,239
Control								
Public	1,548	7,441,611	2,390,297	105,213	5,994,633	173,216	219,384	47,483
Private	1,755	5,389,036	783,412	121,554	3,805,050	169,644	144,880	35,756
Level [2]								
Total 4-year and above	2,032	11,329,318	2,958,732	191,442	9,396,386	300,729	236,733	63,746
Doctor's	514	6,718,281	1,387,609	103,773	4,219,898	179,458	91,590	22,972
Master's	855	3,240,406	1,261,084	62,337	4,665,379	83,749	95,006	25,314
Bachelor's	660	1,360,432	304,087	24,403	499,333	37,196	49,872	15,339
Less than 4-year	1,271	1,501,329	214,977	35,325	403,297	42,131	127,531	19,493
Size (FTE enrollment)								
Less than 1,500	1,754	2,738,825	421,402	76,996	1,796,795	94,329	113,285	27,493
1,500 to 4,999	984	2,953,880	991,479	51,299	2,949,916	93,238	124,272	24,284
5,000 or more	565	7,137,942	1,760,828	98,472	5,052,972	155,293	126,707	31,462
Carnegie Classification (1994) [2]								
Research I and II	125	3,958,124	477,343	43,658	1,644,212	68,252	43,612	10,575
Doctoral I and II	110	1,506,249	486,696	31,221	1,282,087	53,736	21,402	5,839
Master's I and II	518	2,737,427	1,338,141	43,700	4,359,261	76,715	66,843	18,360
Baccalaureate I and II	606	1,865,973	438,681	26,884	1,334,539	60,586	65,253	14,751
Associate of Arts	1,175	1,457,631	212,634	33,702	398,993	41,511	123,954	19,063
Specialized	556	1,054,769	196,743	38,039	654,679	36,304	31,840	10,285
Not classified	213	250,475	23,471	9,563	125,913	5,756	11,361	4,368

[1] Institutions with accreditation at the higher education level recognized by the Secretary of Education, 1994

[2] While 'level' and 'Carnegie Classification' are similar, there is not complete overlap in the two classifications. 'Level' refers to the highest level of any degree offered by the institution. The 'Carnegie Classification' is based on criteria such as institution mission and research funding in addition to highest level of degree awarded. The Carnegie Classification was developed by The Carnegie Foundation for the Advancement of Teaching and published in *A Classification of Institutions of Higher Education, 1994 Edition*.

[3] 'Sound recordings' was previously labeled 'Audio materials,' and 'Computer files' was previously labeled 'Machine readable materials.'

NOTE: This table is similar to Table 88 in the 1992 Academic Libraries E.D.-TABS report.

SOURCE: 1994 IPEDS Academic Library Survey

Table B-8.-- Number and percent of FTE staff in academic libraries by staff category and by institutional control level, size, and Carnegie Classification of institution: 1994

Institutional characteristic	Total number of libraries	Total FTE staff	Percent	Librarians and other professional		All other paid staff		Contributed service staff		Student assistants	
				FTE	Percent	FTE	Percent	FTE	Percent	FTE	Percent
All higher education institutions [1]	3,303	95,843	100.0%	26,726	27.9%	40,381	42.1%	326	0.3%	28,411	29.6%
Control											
Public	1,548	58,457	61.0	15,748	26.9	25,928	44.4	133	.2	16,648	28.5
Private	1,755	37,386	39.0	10,978	29.4	14,453	38.7	193	.5	11,762	31.5
Level [2]											
Total 4-year and above	2,032	81,689	85.2	22,698	27.8	34,318	42.0	235	.3	24,438	29.9
Doctor's	514	53,158	55.5	14,524	27.3	24,238	45.6	74	.1	14,322	26.9
Master's	855	20,587	21.5	5,907	28.7	7,582	36.8	103	.5	6,996	34.0
Bachelor's	660	7,845	8.2	2,242	28.6	2,457	31.3	58	.7	3,089	39.4
Less than 4-year	1,271	14,154	14.8	4,028	28.5	6,063	42.8	91	.6	3,972	28.1
Size (FTE enrollment)											
Less than 1,500	1,754	15,773	16.5	4,790	30.4	5,207	33.0	180	1.1	5,595	35.5
1,500 to 4,999	984	21,217	22.1	6,187	29.2	8,523	40.2	49	.2	6,458	30.4
5,000 or more	565	58,853	61.4	15,749	26.8	26,651	45.3	96	.2	16,357	27.8
Carnegie Classification (1994) [2]											
Research I and II	125	33,258	34.7	8,987	27.0	15,847	47.7	60	.2	8,364	25.1
Doctoral I and II	110	10,444	10.9	2,788	26.7	4,534	43.4	4	0	3,118	29.9
Master's I and II	518	19,250	20.1	5,416	28.1	7,425	38.6	40	.2	6,369	33.1
Baccalaureate I and II	606	10,612	11.1	2,885	27.2	3,392	32.0	87	.8	4,248	40.0
Associate of Arts	1,175	13,646	14.2	3,915	28.7	5,905	43.3	83	.6	3,743	27.4
Specialized	556	6,853	7.2	2,197	32.1	2,673	39.0	42	.6	1,942	28.3
Not classified	213	1,779	1.9	538	30.2	604	34.0	10	.6	627	35.2

[1] Institutions with accreditation at the higher education level recognized by the Secretary of Education, 1994

[2] While 'level' and 'Carnegie Classification' are similar, there is not complete overlap in the two classifications. 'Level' refers to the highest level of any degree offered by the institution. The 'Carnegie Classification' is based on criteria such as institution mission and research funding in addition to highest level of degree awarded. The Carnegie Classification was developed by The Carnegie Foundation for the Advancement of Teaching and published in *A Classification of Institutions of Higher Education, 1994 Edition*.

NOTE: Columns may not sum to total due to rounding of FTE staff. This table is similar to Table 4B in the 1992 Academic Libraries E.D.-TABS report.

SOURCE: 1994 IPEDS Academic Library Survey

Table B-9.-- Total operating expenditures and number of libraries by category of total operating expenditures, by control, level, size, and Carnegie Classification of institution: 1994

Institutional characteristic	Total number of libraries	Total operating expenditures	Number of libraries								
			Less than $20,000	$20,000 to $49,999	$50,000 to $99,999	$100,000 to $199,999	$200,000 to $299,999	$300,000 to $499,999	$500,000 to $999,999	$1,000,000 to $1,999,999	$2,000,000 or more
All higher education institutions [1]	3,303	$4,013,332,555	43	135	261	531	408	583	561	368	413
Control											
Public	1,548	2,441,579,701	2	13	62	204	195	281	293	214	284
Private	1,755	1,571,752,853	41	122	199	327	213	302	268	154	129
Level [2]											
Total 4-year and above	2,032	3,558,963,059	11	45	90	269	217	333	367	298	402
Doctor's	514	2,495,672,153	2	1	6	24	15	38	48	93	287
Master's	855	792,775,794	2	4	20	76	87	179	218	169	100
Bachelor's	660	266,617,378	7	40	64	168	115	116	100	36	14
Less than 4-year	1,271	454,369,496	32	90	171	262	191	250	194	70	11
Size (FTE enrollment)											
Less than 1,500	1,754	551,877,423	43	134	257	466	308	311	145	69	21
1,500 to 4,999	984	816,909,208	0	1	4	65	99	244	332	168	71
5,000 or more	565	2,644,545,923	0	0	0	0	1	28	84	131	321
Carnegie Classification (1994) [2]											
Research I and II	125	1,622,320,560	0	0	0	0	0	0	0	1	124
Doctoral I and II	110	470,559,663	0	0	0	0	0	0	3	20	87
Master's I and II	518	750,136,280	0	0	0	10	16	67	139	159	127
Baccalaureate I and II	606	369,688,733	1	3	10	82	108	166	151	58	27
Associate of Arts	1,175	443,771,329	24	74	127	244	177	252	198	69	10
Specialized	556	297,179,447	9	34	74	128	79	82	62	55	33
Not classified	213	59,676,543	9	24	50	67	28	16	8	6	5

[1] Institutions with accreditation at the higher education level recognized by the Secretary of Education, 1994

[2] While 'level' and 'Carnegie Classification' are similar, there is not complete overlap in the two classifications. 'Level' refers to the highest level of any degree offered by the institution. The 'Carnegie Classification' is based on criteria such as institution mission and research funding in addition to highest level of degree awarded. The Carnegie Classification was developed by The Carnegie Foundation for the Advancement of Teaching and published in *A Classification of Institutions of Higher Education, 1994 Edition*.

NOTE: This table is similar to Table 1B in the 1992 Academic Libraries E.D.-TABS report.

SOURCE: 1994 IPEDS Academic Library Survey

Table B-10.-- Library operating expenditures by object of expenditure, and salaries as a percent of total operating expenditures, by control, level, size, and Carnegie Classification of institution: 1994

Institutional characteristic	Total number of libraries	Total operating expenditures	Salaries and wages	Salaries and wages as a percent of total operating expenditures	Information resources total [3]	Preservation	All other operating expenditures [4]
All higher education institutions [1]	3,303	$4,013,332,555	$2,021,233,348	50.4%	$1,348,933,468	$46,554,495	$596,611,244
Control							
Public	1,548	2,441,579,701	1,266,859,891	51.9	801,734,367	26,721,951	346,263,493
Private	1,755	1,571,752,853	754,373,458	48.0	547,199,101	19,832,544	250,347,751
Level [2]							
Total 4-year and above	2,032	3,568,963,059	1,729,596,645	48.6	1,250,817,603	45,586,564	532,962,247
Doctor's	514	2,495,672,153	1,183,857,510	47.4	891,923,301	35,696,842	384,194,500
Master's	855	792,775,794	411,509,293	51.9	269,656,676	7,232,800	104,377,026
Bachelor's	660	266,617,378	132,408,528	49.7	87,774,242	2,602,242	43,832,366
Less than 4-year	1,271	454,369,496	291,636,703	64.2	98,115,865	967,931	63,648,997
Size (FTE enrollment)							
Less than 1,500	1,754	661,877,423	279,523,780	50.6	177,944,470	5,535,117	88,874,055
1,500 to 4,999	984	816,909,208	425,421,834	52.1	261,312,258	6,670,079	123,505,038
5,000 or more	565	2,644,545,923	1,316,287,734	49.8	909,676,740	34,349,299	384,232,151
Carnegie Classification (1994) [2]							
Research I and II	125	1,622,320,560	768,332,987	47.4	575,230,078	25,307,152	253,450,344
Doctoral I and II	110	470,559,663	218,378,625	46.4	178,230,036	5,490,568	68,460,434
Master's I and II	518	750,136,280	391,759,514	52.2	256,162,891	6,640,243	95,573,632
Baccalaureate I and II	606	369,688,733	180,458,706	48.8	127,961,159	4,079,248	57,189,620
Associate of Arts	1,175	443,771,329	285,144,069	64.3	95,951,459	958,574	61,717,228
Specialized	556	297,179,447	145,901,424	49.1	95,969,119	3,733,006	51,575,898
Not classified	213	59,676,543	31,258,024	52.4	19,428,727	345,705	8,644,087

[1] Institutions with accreditation at the higher education level recognized by the Secretary of Education, 1994.
[2] While "level" and "Carnegie Classification" are similar, there is not complete overlap in the two classifications. "Level" refers to the highest level of any degree offered by the institution. The "Carnegie Classification" is based on criteria such as institution mission and research funding in addition to highest level of degree awarded. The Carnegie Classification was developed by The Carnegie Foundation for the Advancement of Teaching and published in *A Classification of Institutions of Higher Education, 1994 Edition*.
[3] "Information resources total" most closely resembles the category "Collection expenditures total" in the 1992 Academic Libraries E.D.-TABS report.
[4] "All other operating expenditures" includes furniture and equipment, computer hardware and software, bibliographic utilities, networks, consortia, and all other operating expenditures.
NOTE: This table is similar to Table 2B in the 1992 Academic Libraries E.D.-TABS report.
SOURCE: 1994 IPEDS Academic Library Survey

Table B-11.-- Operating expenditures for information resources, equipment and other selected expenditures by category, by control, level, size, and Carnegie Classification of institution: 1994

Institutional characteristic	Total number of libraries	Information resources total [3]	Books and bound serials	Current serial subscriptions	Microforms	Audiovisual materials	Computer files/search services [4]	Document delivery/inter-library loan [4]	Other information resources	Furniture and equipment [4]	Computer hardware and software	Bibliographic utilities, networks, consortia [4]	Other operating expenditures
All higher education institutions [1]	3,303	$1,348,933,468	$442,495,007	$690,410,314	$62,420,878	$28,753,032	$70,792,475	$12,238,273	$41,823,488	$55,915,033	$128,127,822	$81,105,704	$331,462,685
Control													
Public	1,548	801,734,367	249,419,632	425,853,261	35,791,516	18,280,503	39,781,805	7,507,845	25,099,805	34,523,061	80,208,226	42,722,255	188,809,950
Private	1,755	547,199,101	193,075,375	264,557,053	26,629,363	10,472,529	31,010,669	4,730,429	16,723,683	21,391,971	47,919,596	38,383,449	142,652,735
Level [2]													
Total 4-year and above	2,032	1,250,817,603	399,479,204	656,807,561	54,233,726	19,944,911	61,910,267	11,432,982	38,008,952	45,209,972	112,828,799	72,383,778	302,539,698
Doctor's	514	891,923,301	268,685,502	505,588,892	31,978,268	9,496,760	39,168,128	7,967,182	29,038,570	29,482,348	79,304,243	42,984,177	232,423,732
Master's	855	269,656,676	93,450,302	124,894,170	17,393,668	7,233,497	16,891,760	2,539,537	7,253,741	11,127,253	25,008,247	21,499,098	46,742,429
Bachelor's	660	87,774,242	36,895,794	34,442,562	4,823,917	3,191,124	5,823,880	912,433	1,684,531	4,501,934	8,413,423	7,845,975	23,071,034
Less than 4-year	1,271	98,115,865	43,015,803	24,602,753	8,187,152	8,808,121	8,882,208	805,292	3,814,537	10,705,061	15,299,023	8,721,926	28,922,987
Size (FTE enrollment)													
Less than 1,500	1,754	177,944,470	65,480,966	74,363,535	10,543,301	6,604,533	12,536,397	2,384,447	6,031,292	9,891,855	19,839,574	16,040,411	43,102,216
1,500 to 4,999	984	261,312,258	93,157,810	117,333,476	15,527,143	9,213,303	18,234,805	2,399,746	5,445,975	12,932,422	26,069,574	21,354,888	63,148,154
5,000 or more	565	909,676,740	283,856,231	498,713,303	36,350,435	12,935,196	40,021,272	7,454,081	30,346,222	33,090,756	82,218,674	43,710,406	225,212,315
Carnegie Classification (1994) [2]													
Research I and II	125	575,230,078	176,774,795	325,460,091	18,546,655	4,868,657	22,575,068	4,681,242	22,323,570	18,493,404	50,267,520	24,285,511	160,403,908
Doctoral I and II	110	178,230,036	50,488,308	104,648,569	7,317,144	2,147,758	8,682,245	1,566,519	3,379,493	5,771,346	13,824,817	9,710,570	39,153,700
Master's I and II	518	256,162,891	85,852,832	124,205,902	16,087,981	6,424,985	14,952,217	2,276,458	6,362,515	10,802,367	24,915,194	17,599,031	42,257,040
Baccalaureate I and II	606	127,961,159	52,736,267	53,070,961	6,948,815	3,850,493	7,984,972	1,354,711	2,014,940	5,081,171	11,459,304	11,968,240	28,680,905
Associate of Arts	1,175	95,951,459	42,313,848	23,880,839	8,109,849	8,618,700	8,580,641	720,955	3,726,627	10,452,039	14,759,585	8,664,496	27,841,108
Specialized	556	95,969,119	27,484,124	50,322,610	4,349,653	2,228,801	6,640,981	1,421,229	3,521,722	4,285,951	10,724,576	7,803,854	28,761,518
Not classified	213	19,428,727	6,844,834	8,821,343	1,060,781	613,638	1,376,351	217,159	494,621	1,028,753	2,176,827	1,074,002	4,364,505

[1] Institutions with accreditation at the higher education level recognized by the Secretary of Education, 1994.
[2] While 'level' and 'Carnegie Classification' are similar, there is not complete overlap in the two classifications. 'Level' refers to the highest level of any degree offered by the institution. The 'Carnegie Classification' is based on criteria such as institution mission and research funding in addition to highest level of degree awarded. The Carnegie Classification was developed by The Carnegie Foundation for the Advancement of Teaching and published in *A Classification of Institutions of Higher Education, 1994 Edition*.
[3] 'Information resources total' most closely resembles the category 'Collection expenditures total' in the 1992 Academic Libraries E.D.-TABS report.
[4] 'Computer files/search services' was formerly labeled 'Machine readable materials.' Both 'Document delivery/interlibrary loan' and 'Bibliographic utilities, networks, consortia' are new categories in the 1994 survey. 'Computer hardware and software' was previously included in the category 'Furniture and equipment,' but was created as a separate category in 1994.
NOTE: This table presents all the separate categories of expenses included on the survey form except 'Salaries and wages' and 'Preservation.' Totals for these categories are included in Tables 10A and 10B. This table is similar to Table 3B in the 1992 Academic Libraries E.D.-TABS report.
SOURCE: 1994 IPEDS Academic Library Survey.

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Table B-12a.-- Academic library circulation per full-time-equivalent (FTE) enrollment, by level and control of institution, United States: 1994

	Total higher education institutions [1]	4-year institutions				Less than 4-year	Public	Private
		Total 4-year institutions	Doctor's highest level of degree	Master's highest level of degree	Bachelor's highest level of degree			
General circulation per FTE student [2]								
Lower quartile	6.3	10.0	14.4	9.5	7.9	4.0	5.6	7.6
Median	12.5	17.2	23.1	15.2	16.1	6.8	9.9	16.2
Upper quartile	23.4	32.2	45.6	25.5	32.2	12.6	16.6	33.3
Reserve circulation per FTE student [2]								
Lower quartile	1.1	2.1	3.1	1.9	1.6	.5	.9	1.4
Median	3.2	4.4	5.6	3.9	3.9	1.7	2.4	4.3
Upper quartile	6.7	8.6	10.9	7.2	8.8	3.7	4.7	9.1
Total circulation per FTE student [2]								
Lower quartile	8.8	14.0	19.0	13.3	12.0	5.7	7.7	11.4
Median	16.6	22.8	31.1	20.2	21.4	9.5	12.9	22.0
Upper quartile	31.1	42.5	58.4	33.1	43.5	15.8	21.2	45.5

[1] Institutions with accreditation at the higher education level recognized by the Secretary of Education, 1994
[2] FTE enrollment is calculated by adding one-third of part-time enrollment to full-time enrollment.
NOTE: This table is similar to Table 11D in the 1992 Academic Libraries E.D.-TABS report, which reports only 'General circulation.'
SOURCE: 1994 IPEDS Academic Library Survey and 1993-94 IPEDS Fall Enrollment Survey

Table B-12b.-- Number of books and bound serials volumes held at the end of the year, and added during the year by academic libraries per full-time-equivalent (FTE) enrollment, by level and control of institution, United States: 1994

	Total higher education institutions [1]	4-year institutions				Less than 4-year	Public	Private
		Total 4-year institutions	Doctor's highest level of degree	Master's highest level of degree	Bachelor's highest level of degree			
Volumes held per FTE student [2]								
Lower quartile	20.7	56.2	69.6	53.9	47.4	11.3	15.9	42.0
Median	56.9	93.3	111.2	79.9	98.1	18.4	30.5	95.8
Upper quartile	115.9	170.0	222.2	140.2	169.1	31.2	62.0	182.4
Volumes added per FTE student [2]								
Lower quartile	.7	1.3	1.8	1.2	1.2	.3	.4	1.3
Median	1.6	2.3	3.1	2.0	2.3	.6	.9	2.6
Upper quartile	3.3	4.5	5.8	3.9	4.2	1.3	1.7	5.0

[1] Institutions with accreditation at the higher education level recognized by the Secretary of Education, 1994
[2] FTE enrollment is calculated by adding one-third of part-time enrollment to full-time enrollment.
NOTE: This table is similar to Table 11C in the 1992 Academic Libraries E.D.-TABS report.
SOURCE: 1994 IPEDS Academic Library Survey and 1993-94 IPEDS Fall Enrollment Survey

Table 8-12c.-- Total academic library staff, except student assistants, per 1,000 full-time-equivalent (FTE) enrollment, by level and control of institution, United States: 1994

	Total higher education institutions[1]	4-year institutions				Less than 4-year	Public	Private
		Total 4-year institutions	Doctor's highest level of degree	Master's highest level of degree	Bachelor's highest level of degree			
Total staff per 1,000 FTE students[2]								
Lower quartile	3.7	5.2	6.3	4.8	5.1	2.4	2.9	5.4
Median	5.9	7.5	9.8	6.5	7.7	3.6	4.2	8.1
Upper quartile	9.9	12.5	18.5	10.2	11.9	5.6	6.0	14.2

[1] Institutions with accreditation at the higher education level recognized by the Secretary of Education, 1994
[2] FTE enrollment is calculated by adding one-third of part-time enrollment to full-time enrollment.
NOTE: This table is similar to Table 11E in the 1992 Academic Libraries E.D.-TABS report.
SOURCE: 1994 IPEDS Academic Library Survey and 1993-94 IPEDS Fall Enrollment Survey.

Table B-12d.-- Total operating expenditures for academic libraries, information resources, and serials expenditures per full-time-equivalent (FTE) enrollment, by level and control of institution, United States: 1994

	Total higher education institutions [1]	4-year institutions				Less than 4-year	Public	Private
		Total 4-year institutions	Doctor's highest level of degree	Master's highest level of degree	Bachelor's highest level of degree			
Total operating expenditures per FTE student [2]								
Lower quartile	$169.32	$274.34	$376.50	$263.86	$235.58	$110.00	$136.30	$252.92
Median	$290.81	$399.00	$594.29	$341.25	$368.33	$158.43	$208.60	$398.33
Upper quartile	$502.88	$698.20	$1,100.00	$539.33	$565.67	$237.75	$312.50	$742.25
Expenditures for information resources per FTE student [2, 3]								
Lower quartile	$40.26	$82.38	$135.12	$78.04	$66.38	$21.88	$28.89	$69.78
Median	$86.15	$128.86	$209.00	$109.90	$106.19	$35.71	$53.50	$121.05
Upper quartile	$164.98	$227.88	$378.50	$184.38	$180.25	$59.38	$99.75	$234.81
Expenditures for current serials per FTE student [2]								
Lower quartile	$9.21	$27.03	$60.19	$27.44	$17.55	$4.89	$6.80	$16.71
Median	$26.71	$49.02	$106.00	$44.25	$33.12	$8.48	$14.14	$39.42
Upper quartile	$63.84	$101.78	$189.50	$72.62	$62.03	$14.60	$43.19	$84.21

[1] Institutions with accreditation at the higher education level recognized by the Secretary of Education, 1994
[2] FTE enrollment is calculated by adding one-third of part-time enrollment to full-time enrollment.
[3] 'Information resources' most closely resembles the category 'Collection expenditures' in the 1992 Academic Libraries E.D.-TABS report.
NOTE: This table is similar to Table 11B in the 1992 Academic Libraries E.D.-TABS report.
SOURCE: 1994 IPEDS Academic Library Survey and 1993-94 IPEDS Fall Enrollment Survey

Table B-12e.-- Academic library expenditures as a percentage of E&G expenditures; and expenditures for information resources, current serials, and salaries and wages as a percentage of total library operating expenditures, by level and control of institution, United States: 1994

	Total higher education institutions[1]	4-year institutions				Less than 4-year	Public	Private
		Total 4-year institutions	Doctor's highest level of degree	Master's highest level of degree	Bachelor's highest level of degree			
Total operating expenditures as percentage of E&G expenditures								
Lower quartile	2.0%	2.3%	2.4%	2.4%	2.2%	1.6%	1.9%	2.1%
Median	2.8%	3.1%	3.2%	3.1%	2.9%	2.3%	2.6%	3.0%
Upper quartile	3.9%	4.2%	4.6%	4.1%	4.0%	3.1%	3.4%	4.5%
Expenditures for information resources as a percentage of total operating expenditures[2]								
Lower quartile	22.0%	26.7%	30.6%	26.4%	24.6%	17.1%	20.4%	24.2%
Median	29.7%	32.9%	36.1%	32.6%	31.1%	23.2%	27.5%	31.5%
Upper quartile	36.9%	39.3%	41.7%	39.2%	37.5%	30.1%	34.7%	38.4%
Expenditures for current serials as a percentage of total information resources expenditures								
Lower quartile	21.8%	27.5%	39.4%	28.4%	23.0%	16.9%	21.8%	21.8%
Median	32.9%	40.5%	54.1%	39.7%	33.8%	24.7%	32.2%	33.4%
Upper quartile	48.5%	53.8%	64.5%	50.8%	45.1%	33.7%	50.4%	46.7%
Salaries and wages as a percentage of total operating expenditures								
Lower quartile	46.7%	44.8%	43.1%	45.1%	47.0%	52.9%	49.0%	45.1%
Median	54.8%	51.2%	47.5%	52.2%	54.1%	61.7%	57.4%	52.9%
Upper quartile	64.4%	58.9%	53.2%	59.2%	62.2%	70.9%	67.6%	61.0%

[1] Institutions with accreditation at the higher education level recognized by the Secretary of Education, 1994.
[2] 'Information resources' most closely resembles the category 'Collection expenditures' in the 1992 Academic Libraries E.D.-TABS report.
NOTE: This table is similar to Table 11A in the 1992 Academic Libraries E.D.-TABS report.
SOURCE: 1994 IPEDS Academic Library Survey and 1993-94 IPEDS Finance Survey.

Appendix C: Academic Library Indicators

Indicators for Academic Library Performance:
Ratios from the ARL Statistics
1993-94 and 1994-95[1]

Ratio 1: Professional Staff as a Percentage of Total Staff
Ratio 2: Support Staff as a Percentage of Total Staff
Ratio 3: Student Assistants as a Percentage of Total Staff
Ratio 4: Ratio of Support to Professional Staff
Ratio 5: Items Loaned over Items Borrowed
Ratio 6: Serials Expenditures over Materials Expenditures
Ratio 7: Library Materials Expenditures over Total Expenditures
Ratio 8: Binding Expenditures over Total Expenditures
Ratio 9: Salary Expenditures over Total Expenditures
Ratio 10: Operating Expenditures over Total Expenditures
Ratio 11: Unit Price of Monographs
Ratio 12: Unit Price of Serials
Ratio 13: Items Borrowed per Faculty
Ratio 14: Total Expenditures per Faculty
Ratio 15: Volumes Added (Gross) per Faculty
Ratio 16: Volumes Held per Faculty
Ratio 17: Paid Serial Subscriptions per Faculty
Ratio 18: Monographs Purchased per Faculty
Ratio 19: Number of Faculty per Library Staff Member
Ratio 20: Expenditures for Library Materials per Faculty
Ratio 21: Expenditures for Serials per Faculty
Ratio 22: Items Borrowed per Student
Ratio 23: Total Expenditures per Student
Ratio 24: Volumes Added (Gross) per Student
Ratio 25: Volumes Held per Student
Ratio 26: Paid Serial Subscriptions per Student
Ratio 27: Monographs Purchased per Student
Ratio 28: Number of Students per Library Staff
Ratio 29: Expenditures for Library Materials per Student
Ratio 30: Expenditures for Serials per Student

[1]Taken from the Association of Research Libraries, Statistics and Measurement Home/ARL Statistics Home, November, 1996

Appendix D: Survey Questionnaire (Including Instructions and Definitions)

OMB No. 1850-0582: Approval Expires 07/31/9

FORM **IPEDS-L**
(8-1-94)

U.S. DEPARTMENT OF COMMERCE
BUREAU OF THE CENSUS
ACTING AS COLLECTING AGENT FOR THE
U.S. DEPARTMENT OF EDUCATION
NATIONAL CENTER FOR EDUCATION STATISTICS

INTEGRATED POSTSECONDARY EDUCATION DATA SYSTEM

ACADEMIC LIBRARIES SURVEY 1994

***Please read** the accompanying instructions before completing this survey form. Report data ONLY for the institution in the address label. If data for any other institutions or branch campuses are included in this report because they CANNOT be reported separately, please provide a list of these schools.*

NOTE – The completion of this survey, in a timely and accurate manner, is **MANDATORY** for all institutions which participate or are applicants for participation in any Federal financial assistance program authorized by Title IV of the Higher Education Act of 1965, as amended. The completion of this survey is mandated by 20 U.S.C. 1094(a)(17).

For those institutions not required to complete this survey on the basis of the above requirements, the completion of this survey is voluntary and authorized by 20 U.S.C. 1221e-1.

Public reporting burden for this collection of information is estimated to average 1.0 hour per response but may range from 30 minutes to 2.5 hours depending on whether the information is readily accessible to machine readable files. The burden estimate includes the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the U.S. Department of Education, Information Management and Compliance Division, Washington, DC 20202-4651, and to the Office of Management and Budget, Paperwork Reduction Project 1850-0582, Washington, DC 20503.

Please correct any errors in the name, address, and ZIP Code

If there are any questions about this form, contact a Bureau of the Census IPEDS representative at (800) 451–6236.

Date due: November 15, 1994

RETURN TO

1. Name of respondent	**2.** Title of respondent	**3.** Telephone *(Area code, number, ext.)*

Does your institution have its own library as defined in Part A of the instructions? ☐ Yes ☐ No — *Please return this blank survey to the address shown above.*

PURPOSE OF THE SURVEY

The National Center for Education Statistics (NCES) collects these data periodically to obtain and report a comprehensive picture on the status of collections, transactions, staff, service per typical week, and library operating expenditures in postsecondary institutions. The survey is being conducted in compliance with the Center's mission "to collect, and analyze, and disseminate statistics and other data related to education in the United States . . .". (20 U.S.C. 1221e–1, General Education Provisions Act, Sec. 406(b), as amended.)

USES OF DATA

Collection of these data over time will enable the nation to plan effectively for the development and use of postsecondary education library resources. Congress uses the data to assess the need for revisions of existing legislation concerning libraries and the allocation of Federal funds. Federal agencies need the data to evaluate and administer library programs. State education agencies and college librarians and administrators use the data for regional and national comparisons of library resources to plan for the effective use of funds. Finally, library associations and researchers use the survey results to determine the status of library operations and the profession.

The definitions and instructions for compiling IPEDS data have been designed to minimize comparability problems. However, postsecondary education institutions differ widely among themselves. As a result of these differences, comparisons of data provided by individual institutions may be misleading.

FORM IPEDS L 6 1 94

L

COMBINED DATA FOR MORE THAN ONE INSTITUTION OR BRANCH

Note: If the institution or administrative unit named on this report is including Libraries survey data for other institutions or branches in this report, list the following information for the additional institutions or branches.

UNITID	Institution name	Address	City	State	ZIP Code

Notes *(Reference part and line)*

105

106

L

Part A — NUMBER OF PUBLIC SERVICE OUTLETS, FISCAL YEAR 1994

Line No.	Item	Number
01	Branch and independent libraries — *Exclude main or central library.*	

Part B — LIBRARY STAFF, FALL 1994
(Exclude maintenance and custodial staff.)

NOTE: *Report data to two decimals.*

Line No.	Staff	Number of FTE*
02	Librarians and other professional staff	
03	All other paid staff (except student assistants)	
04	Contributed services staff	
05	Student assistants from all funding sources	
06	**Total FTE staff** — *(Sum of lines 2 through 5)**	

*FTE = Full-time equivalent

Part C — LIBRARY OPERATING EXPENDITURES, FISCAL YEAR 1994

L

NOTE: *Do not report the same expenditures more than once.*

Line No.	Category	Amount *(Whole dollars only)*
	Salaries and wages — *Exclude employee fringe benefits.*	
07	Librarians and other professional staff	$
08	All other paid staff (except student assistants)	
09	Student assistants	
	Information resources	
10	Books, serial backfiles, and other print materials — *Exclude current serials and all microforms.*	
11	Current serials — *Exclude microforms, audiovisual materials, and machine-readable materials.*	
12	Microforms — *Include current serials.*	
13	Audiovisual materials — *Include current serials.*	
14	*Computer files and search services — Include current serials.*	
15	Document delivery/Interlibrary loan	
16	Other	
17	Preservation	
18	Furniture and equipment — *Exclude computer equipment.*	
19	Computer hardware and software — *Include maintenance.*	
20	Bibliographic utilities, networks, and consortia	
21	All other operating expenditures	
22	**Total operating expenditures** *(Sum of lines 7 through 21)*	$
23	Employee fringe benefits (if paid from the library budget)	$

Part D — LIBRARY COLLECTIONS, FISCAL YEAR 1994

L

Line No.	Category	Total number — Added during fiscal year (1)	Total number — Held at end of fiscal year (2)
	Books, serial backfiles, and government documents that are accessible through the library's catalog — *Include bound periodicals and newspapers and exclude microforms.*		
24	Volumes		
25	Titles		
	Government documents — *Include government documents that are not reported elsewhere.*		
26	Units		
27	Titles		
	Current serials — *Include periodicals, newspapers, and government documents.*		
28	Total number of paid and unpaid subscriptions		
29	Titles (number of unique titles)		
	Microforms		
30	Units		
31	Titles		
32	Manuscripts and archives — Linear feet		
33	Cartographic materials — Units		
34	Graphic materials — Units		
	Sound recordings		
35	Units		
36	Titles		
	Film and video materials		
37	Units		
38	Titles		
	Computer files		
39	Units		
40	Titles		
41	Other library materials — Units		

L

Part E — LIBRARY SERVICES, FISCAL YEAR 1994

Line No.	Category	Number
	Circulation transactions	
42	General collection	
43	Reserve collection	
	Document delivery/Interlibrary loan	
44	Provided to other libraries	
45	Received from other libraries or commercial services	
	Information service to groups	
46	Number of presentations	
47	Number of persons served in presentations	

Part F — LIBRARY SERVICES, TYPICAL WEEK, FALL 1994

Line No.	Category	Number
48	Public service hours	
49	Gate count	
50	Reference transactions — *include computer searching.*	

GENERAL INSTRUCTIONS — L

Please respond to each item on this report in the space provided. Please do not leave any lines blank. If the appropriate answer is zero or none, use 0. If an exact figure is unavailable, use U/A. Include data for the main or central library and all branch and independent libraries that were open all or part of fiscal year 1994.

INSTITUTIONAL IDENTIFICATION

In the space provided on the front page of this report, make any necessary corrections to the preprinted address information. Also, please enter the name, title, area code and telephone number of the person responsible for completing the report.

PERIOD OF REPORT

Report information for the following time periods as specified in each section:

1. **Fiscal year 1994** — A 12-month period between June 1, 1993 and September 30, 1994 which corresponds to your institution's fiscal year. (For Sections A, C, D, E)
2. **Typical week, Fall 1994** — A typical week is one that is neither unusually busy nor unusually slow. Avoid vacation periods for key staff or days when unusual events are taking place on the campus or in the library. Choose a week in which the library is open its regular hours. Include any seven consecutive calendar days. (Section F)
3. **Fall 1994** — The period during the fall of 1994 when the survey form is being completed. (Section B – Library Staff)

Part A — NUMBER OF PUBLIC SERVICE OUTLETS, FISCAL YEAR 1994

Library — An entity that provides all of the following:

1. An organized collection of printed or other materials, or a combination thereof;
2. A staff trained to provide and interpret such materials as required to meet the informational, cultural, recreational, or educational needs of clientele;
3. An established schedule in which services of the staff are available to clientele;
4. The physical facilities necessary to support such a collection, staff, and schedule.

This includes libraries that are part of learning resource centers.

Branch and independent libraries (line 1) — Report the number of branch and independent libraries at your institution that were open all or part of FY 1994. EXCLUDE THE MAIN OR CENTRAL LIBRARY. Branch and independent libraries are defined as auxiliary library service outlets with quarters separate from the central library of an institution which have a basic collection of books and other materials, a regular staffing level, and an established schedule. Branch and independent libraries are administered **either** by the central library **or**, as in the case of some libraries (such as law, medical, etc.), through the administrative structure of other units within the university. Departmental study/reading rooms are not included. Include data for all branch and independent libraries on the campus. Include libraries on **branch campuses** (i.e., located in another community) if those campuses are registered under the same NCES UNITID number as the main campus. (Exclude libraries on branch campuses that have a separate identification number.)

Part B — LIBRARY STAFF, FALL 1994

Full-time equivalent (FTE) employees — Report the number of filled or temporarily vacant full-time equivalent (FTE) positions during Fall 1994 paid from funds under library control. To compute full-time equivalents of part-time employees and student assistants, take the TOTAL number of hours worked per week by part-time employees IN EACH CATEGORY and divide it by the number of hours CONSIDERED BY THE REPORTING LIBRARY TO BE A FULL-TIME WORK WEEK (e.g., 60 hours per week of part-time work divided by 40 hours per full-time week equals 1.5 FTE). Data should be reported to two decimal places.

Librarians and other professional staff (line 2) — Report the total FTE of librarians and other professional staff, including administrators. Report staff members doing work that requires professional education (the master's degree or its equivalent) in the theoretical and scientific aspects of librarianship; also, in some libraries, staff performing professional level tasks who, though not librarians, have equivalent education and training in related fields (e.g., archives, computer sciences, business administration, education).

All other paid staff (except student assistants) (line 3) — Report the total FTE of all other library staff who are paid annual salaries or hourly wages except students, who are reported on line 5. Include technical and clerical staff, but exclude maintenance and custodial staff.

Contributed services staff (line 4) — Report the total FTE for contributed services staff. Contributed services staff are those, such as members of religious orders, whose services are valued by bookkeeping entries rather than by full cash transactions. Do **not** include volunteers.

Student assistants from all funding sources (line 5) — Report the total FTE of student assistants, employed on an hourly basis whose wages are paid from funds under library control or from a budget other than the library budget, including College Work Study Program. Exclude maintenance and custodial staff.

Total FTE staff (line 6) — Report the sum of lines 2 through 5.

Part C — LIBRARY OPERATING EXPENDITURES, FISCAL YEAR 1994

Expenditures (lines 7–23) — Report funds expended by the library in fiscal year 1994 (regardless of when received) from its regular budget and from all other sources, e.g., research grants, special projects, gifts and endowments, and fees for services. If items in this section are not paid from the library budget but can be easily identified in other parts of the institution's budget, report them here. Expenditures should be reported for the 12-month period which corresponds to your library's fiscal year between the calendar period June 1, 1993, to September 30, 1994. All expenditures should be reported in whole dollars in the most appropriate category to provide an unduplicated count of expenditures. Exclude expenditures for new buildings and building renovation. DO NOT REPORT ANY EXPENDITURES MORE THAN ONCE.

REMOVE INSTRUCTIONS BEFORE MAILING AND RETAIN FOR YOUR FILES.

Part C — LIBRARY OPERATING EXPENDITURES, FISCAL YEAR 1994 — Continued

Salaries and wages (lines 7–9) — Report expenditures for full-time and part-time salaries and wages before deductions. Exclude employee fringe benefits provided by your institution for all regular library staff which may be reported on line 23. Include salaries and wages from all sources paid to students serving on an hourly basis. Federal funds paid to students in the College Work Study Program should be reported here. Exclude contributed services and maintenance and custodial staff.

Books, serial backfiles, and other print materials (line 10) — Report expenditures for all materials consisting primarily of words and usually produced by making an impression with ink on paper. Included in this category are materials that do not require magnification: books, government documents, braille materials, ephemeral print materials, and the like. Exclude current serial subscriptions and microforms.

Current serials (line 11) — Report expenditures for current subscriptions to serials. These are publications issued in successive parts, usually at regular intervals, and, as a rule, intended to be continued indefinitely. Serials include periodicals, newspapers, annuals (reports, yearbooks, etc.), memoirs, proceedings, and transactions of societies. Exclude expenditures for microforms, audiovisual materials, and machine-readable materials.

Microforms (line 12) — Report expenditures for all photographic reproductions of textual, tabular, or graphic materials reduced in size so that they can be used only with magnification. Examples of microforms are roll microfilm, microcard, microfiche, and ultrafiche. Include current serials.

Audiovisual materials (line 13) — Report expenditures for all library materials that are displayed by visual projection or magnification or through sound reproduction, or both, including graphic materials, audio materials, motion pictures, video materials, and special visual materials such as three-dimensional materials. Include current serials.

Computer files and search services (line 14) — Report expenditures for materials considered part of the collection, whether purchased or leased, such as CD-ROMs, magnetic tapes, and magnetic disks, that are designed to be processed by a computer or similar machine. Examples are U.S. Census data tapes, locally-mounted databases, and reference tools on CD-ROM, tape, or disk. Include current serials. Include expenditures for online searches of remote databases. Include expenditures for equipment when the cost is inseparably bundled into the price of the information service product. Exclude expenses for library system software and microcomputer software used only by the library staff which are reported on line 19.

Document delivery/interlibrary loan (line 15) — Report expenditures for document delivery and interlibrary loan services. Include fees paid for photocopies, costs of telefacsimile transmission, royalties and access fees paid to provide document delivery or interlibrary loan. Include fees paid to bibliographic utilities if the portion paid for interlibrary loan can be separately counted. Do not count expenditures related to transactions between the main or central library and any libraries reported in Part A, transactions between libraries reported in Part A, or expenditures for on campus delivery.

Other (line 16) — Report any other collection expenditures not already included on lines 10–15 such as expenditures for cartographic materials and manuscripts.

Preservation (line 17) — Report expenditures for the activities associated with maintaining library and archival materials for use either in their original physical form or in some other usable way. This includes but is not limited to binding and rebinding, materials conservation, deacidification, lamination, and restoration.

Furniture and equipment (line 18) — Report expenditures for all library furniture and equipment purchased during the 1994 fiscal year. Include microform equipment, audiovisual equipment, and related maintenance costs.

Computer hardware and software (line 19) — Report expenditures from the library budget for computer hardware and software used to support library operations, whether purchased or leased, mainframe or microcomputer. Include expenditures for maintenance. Include the expenditure for equipment used to run information service products when that expenditure can be separated from the price of the product. Exclude expenditures reported on line 14.

Bibliographic utilities, networks, and consortia (line 20) — Report expenditures for services provided by national, regional, and local bibliographic utilities, networks, and consortia. Exclude expenditures already reported on lines 14 and 15.

All other operating expenditures (line 21) — Report all other expenditures not already reported on lines 7–20 except employee fringe benefits which are reported on line 23. Exclude expenditures for new buildings and building renovations.

Total (line 22) — Report the sum of lines 7 through 21.

Employee fringe benefits (line 23) — If benefits are paid from the library budget, report the amount here.

Part D — LIBRARY COLLECTIONS, FISCAL YEAR 1994

NOTE — Government documents should be included in the count for each format (i.e., lines 24, 25, and 28–41).

Column (1), Total number added during fiscal year — Report the gross number of each category added. Do not subtract the number withdrawn.

Column (2), Total number held at end of fiscal year — Report the total number of each category held at end of fiscal year. To get this figure, take the total number held at the end of the previous fiscal year, add the number added during the fiscal year just ended and subtract the number withdrawn during that period.

Units (lines 26, 30, 33, 34, 35, 37, 39, 41) — An individual physical item of library material. Examples of units are: a volume (books and serials); a reel, sheet, or card (microforms); a sheet or bound atlas (cartographic materials); a filmstrip, slide, photograph, or print (graphic materials); a disk, cassette, cartridge, or reel (sound recordings, film and video materials); a disk, tape, or cartridge (computer files).

Volumes (line 24) — Report the number of volumes of any printed, mimeographed, or processed work contained in one binding or portfolio, hardbound or paperbound, which has been cataloged, classified, or otherwise made ready for use. Include any government documents that are accessible through the library's catalog regardless of whether or not they are separately shelved. This includes documents for which records are provided by the library or downloaded from other sources into the library catalog.

Titles (lines 25, 27, 29, 31, 36, 38, 40) — Report the number of titles of publications which form a separate bibliographic whole, whether issued in one or several volumes, reels, disks, slides, or parts. The term "title" applies equally to printed materials, such as books and periodicals, as well as to audiovisual materials, microforms, and machine-readable materials. Usually, but not always, there will be a separate shelflist entry for each title. (SHELFLIST: A record of materials in a library, arranged in the order in which the materials stand when they are shelved or stored.) Thus, six copies of the same edition of a title count as one title; two editions of the same title which have been cataloged or recorded separately count as two titles; a set of six monographs for which six shelflist entries have been made count as six titles; and two multi-volume sets of the same edition for which one shelflist entry has been made count as one title.

Government documents (lines 26 and 27) — For government documents not accessible through the library catalog and not reported on other lines, report the number of units and titles of materials in all formats.

Current serials (lines 28 and 29) — Report the total number of current serials received including those that are paid for and those received without payment. Include government documents issued serially. Exclude microforms, audiovisual materials, and machine- readable materials.

Microforms (lines 30 and 31) — Report the number of units of microforms and the number of different titles of materials that have been photographically reduced in size for storage, protection and inexpensive publication purposes, and which must be read with the help of enlarging instruments. Examples of microforms are: roll microfilm, microcard, microfiche, and ultrafiche. Include government documents.

Manuscripts and archives (line 32) — Report the linear feet of shelf space occupied by these materials. Manuscripts are handwritten or typed documents, including carbon copies. Archives are non-current records of an organization or institution preserved because of their continuing value. Include government documents.

Cartographic materials (line 33) — Report the number of units of materials representing in whole or in part the earth or any celestial body at any scale. These materials include two- and three-dimensional maps and globes. Include government documents.

Graphic materials (line 34) — Report the number of units of materials for viewing without sound. The materials may or may not be projected or magnified. They include art originals, art prints, art reproductions, slides, transparencies, filmstrips, photographs, pictures, postcards, posters, study prints, and the like. Filmstrips that also include sound should be included on this line. Include government documents.

Sound recordings (lines 35 and 36) — Report the number of units and titles of materials on which sounds (only) are stored (recorded) and that can be reproduced (played back) mechanically, electronically, or both. These materials include audio cassettes, audio cartridges, audio discs, audio reels, talking books, and other sound recordings. Include government documents.

Film and video materials (lines 37 and 38) — Report the number of units and titles of materials on film or video media. Films are produced in a variety of sizes (8, super 8, 16, 35, 55, and 70 mm) and a variety of formats (cartridge, cassette, loop, reel). Video materials include videotapes and laser disks on which pictures and sound are recorded. Include government documents.

Computer files (lines 39 and 40) — Report the number of units and titles of materials such as CD-ROMs, magnetic tapes and magnetic disks, that are designed to be processed by a computer or similar machine. Examples are U.S. Census data tapes, locally-mounted databases, and reference tools on CD-ROM, tape, or floppy disk. Exclude bibliographic records used to manage the collection, library system software, and microcomputer software used only by the library staff. Include current serials. Include government documents. If a CD-ROM subscription for a title is contained on one disc that is updated (i.e., replaced) once a month, count as one unit, not twelve.

Other library materials (line 41) — Report here the number of units of any materials not already included on lines 24–40. Include government documents.

Part E — LIBRARY SERVICES, FISCAL YEAR 1994

Circulation transactions (lines 42 and 43) — Report the number of items lent from the general collection on line 42 and from the reserve collection on line 43 for use usually (although not always) outside the library. These activities include initial charges, either manual or electronic, and also renewals, each of which is reported as a circulation transaction.

Reserve collection (line 43) — Those materials that have been removed from the general library collection and set aside in a library so they will be on hand for a certain course of study or activity in process. Usually, the circulation and length of loan of items in a reserve collection are restricted so that these items will be available to many users who have need of them within a limited time period.

Document delivery/Interlibrary loans (lines 44 and 45) — On line 44, report the number of filled requests for material provided to other libraries. On line 45, report the number of filled requests for material received from other libraries or document delivery services. On both lines, include both originals and copies and materials sent by telefacsimile or other forms of electronic transmission. Do not include transactions between the main or central library and any libraries reported in Part A or transactions between libraries reported in Part A.

Information services to groups (lines 46 and 47) — Report the total number of presentations (line 46) and the total number of persons served by those presentations (line 47). Information services to groups are presentations at which a staff member or person invited by a staff member provides information intended for a number of persons and planned in advance. These services may be either bibliographic instruction or library use presentations, or cultural, recreational, or educational presentations. Presentations both on and off the library premises should be included, as long as they are sponsored by the library. Do not include meetings sponsored by other groups using library meeting rooms.

Part F — LIBRARY SERVICES – TYPICAL WEEK FALL 1994

Collect data during a typical week in the fall. A typical week is defined above under "PERIOD OF REPORT." If waiting for a typical week in Fall 1994 will delay this form, please use typical week data from the preceding fiscal year. If you have data for the entire year, divide by the number of weeks that the library was open.

Part F — LIBRARY SERVICES - TYPICAL WEEK FALL 1994 — Continued

Public service hours (line 48) — Report an unduplicated count of public service hours for both main library and branches reported on line 1 using the following method. If a library is open from 9:00 a.m. to 5:00 p.m. Monday through Friday, it should report 40 hours per week. If several of its branches are also open during those hours, the figure remains 40 hours per week. Should Branch A also be open one evening from 7:00 to 9:00, the total hours during which users can find service becomes 42. If Branch B is open the same hours on the same evening, the total remains 42, but if it is open 2 hours on another evening, or from 5:00 to 7:00 on the evening when Branch A is open later, the total becomes 44 hours during which users can find service.

Gate count (line 49) — Report the number of persons who physically enter library facilities. It is understood that a single person may be counted more than once.

Reference transactions (line 50) — Report the total number of reference transactions. A reference transaction is an information contact that involves the knowledge, use, recommendation, interpretation, or instruction in the use of one or more information sources by a member of the library staff. Information sources include printed and non-printed materials, machine-readable databases (including assistance with computer searching) catalogs and other holdings records, and, through communication or referral, other libraries and institutions, and persons both inside and outside the library. Include information and referral services. If a contact includes both reference and directional services, it should be reported as one reference transaction. When a staff member utilizes information gained from a previous use of information sources to answer a question, report as a reference transaction, even if the source is not consulted again during this transaction. Duration should not be an element in determining whether a transaction is a reference transaction.

Do not report directional transactions here. A directional transaction is an information contact which facilitates the use of the library in which the contact occurs and which does NOT involve the knowledge, use, recommendation, interpretation, or instruction in the use of any information sources other than those which describe the library, such as schedules, floor plans, handbooks, and policy statements. Examples of directional transactions include giving instruction in locating, within the library, staff, library users, or physical features, etc. and giving assistance of a nonbibliographic nature with machines.

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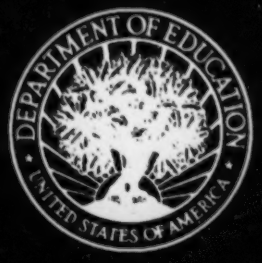

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